Author index for Volume 86 (January through December 2008)

A

Aastveit, A. H., 3062
Abaye, A. O., 2032
Abe, T., 2821
Aberle, E. D., 3235
Abney, C. S., 1951
AbuGhazaleh, A. A., 1114
Adams, D. C., 451
Adams, T. E., 1124
Adams, B. M., 1124
Adesogan, A. T., 882
Ådnøy, T., 33
Afolayan, R. A., 804, 2068
Agabriel, J., 2872
Aguilar, I., 267
Aguilera, J. F., 102
Aherne, F. X., 3181
Ahmad, H. A., 1426
Ahn, D. U., 2962
Ahvenjärvi, S., 651, 2657
Ai, J. S., 1106
Aiken, G. E., 1021
Albuquerque, L. G., 2840
Aldai, N., 3522
Alexander, L. S., 2585
Allee, G. L., 127, 324
Alleoni, G. F., 1770
Alric, M., 1156
Alverez, E. G., 916
Álvarez, I., 1291
Alves, E., 1283
AlZahal, O., 2651
Alzón, M., 3393
An, X. R., 3224
Andanson, S., 2723
Anderson, D. M., 1478
Andersson, K., 432
Anguita, M., 1156
Annen, E. L., 1132
Apple, J. K., 2711
Arana, A., 3393
Araujo, D. B., 2016, 2296
Araujo, R. C., 3511
Archibeque, S. L., 691, 2738
Ariño, L., 1933
Armstrong, T. A., 2711
Arrigo, Y., 1879
Arthington, J. D., 1472, 2016, 2296
Arthur, P. F., 1096
Atkins, J. A., 83, 553
Avendaño, S., 3358
Avendaño-Reyes, L., 2749
Azain, M., 2076, 2082
Azevedo, J. M. T., 1943
Azor, P. J., 1291

B

Bach, A., 419, 702, 1364, 1446
Bach Knudsen, K. E., 2208, 2217
Bader, J. F., 83, 553, 1808
Bailey, D. W., 1271
Baker, D. H., 1832
Baldwin, R. L., 483
Ball, R. O., 364, 609
Banta, J. P., 1868
Bao, J., 1485, 1485
Barchia, I. M., 1096
Barnett, G., 1598
Baro, J. A., 278
Barragán, M. C., 3290
Barreras, A., 2680
Baselga, M., 515
Bass, P. D., 1658
Bates, R. O., 241, 254
Bates, J. S., 3279
Bauchart, D., 2872
Bauman, D. E., 2797
Baumgärtel, T., 1544
Baxa, T. J., 3418
Bazer, F. W., 2797
Bazolli, R. S., 2237
Bearson, B. L., 2377
Beattie, C. W., 17
Beaulieu, A. D., 348
Beck, P. A., 999, 1006, 2043
Beckers, Y., 680
Beckman, D. W., 815
Bee, G., 2357
Behnke, K. C., 2228
Beitz, D. C., 564, 592, 1637, 1649
Belk, K. E., 1658, 3533
Bennett, G. L., 2093, 2103
Benton, J. R., 949
Bequette, B. J., 2277
Bérard, J., 2357
Berardinelli, J. G., 3194
Beretti, F., 3300
Bergen, W. G., 390
Bergsma, R., 1067
Berkeveld, M., 3440
Berri, C., 2888
Berry, E. D., 3617
Berry, D. P., 3338
Berthiaume, R., 1624, 1678
Bertilsson, J., 3465
Bertin, G., 197, 339, 3100
Bertolo, R. F., 609
Bertrand, J. K., 267, 1057, 2471
Betros, C. L., 576
Bhandari, S. K., 836
Bharani Kumar, S. T., 1495
Bhatti, S. A., 134
Bidwell, C. A., 3401
Biscarini, F., 2845
Bishop, C. V., 299
Bishop, S. C., 1747, 1758
Blasco, A., 3409
Blasi, D. A., 1382
Bloemhof, S., 3330
Blomberg, L. A., 2126
Bognanno, M., 2952
Boillot, K., 3586, 3593
Boligon, A. A., 2840
Boling, J. A., 620
Bolstad, T., 3062
Bonfatti, V., 2486
Bonilha, S. F. M., 1770
Bordeau, T., 2888
Borderas, T. F., 2920
Borowicz, P. P., 890
Bosch, G., 2979
Bottema, C. D. K., 1038
Bough, L., 3279
Bovenhuis, H., 2845
Bowker, B. C., 1925
Bowman, J. G. P., 134
Bowman, R., 3137
Boyce, J., 3575
Brashears, M. M., 756
Bregendahl, K., 592, 602, 2962
Bremer, V. R., 1223
Brendemuhl, J. H., 333
Brewer, M. S., 730
Brinkmann, J., 3137
Britt, J. H., 3235
Brokman, A. M., 712
Brooks, J. C., 3575, 3586, 3593
Brotherstone, S., 1737
Brown, D. C., 1459
Brown, P. K., 1533
Brown-Brandl, T., 370
Bruce, B., 17
Bruckmaier, R. M., 2903
Bruininx, E. M. A. M., 2990
Buchanan, D. S., 748, 3640
Buckham Sporer, K. R., 1325
Burgess, J. R., 1789
Burk, A. O., 2596
Burke, J. M., 2328
Burns, J. C., 159, 3647
Burns, M. G., 2539
Burton, J. L., 1325
Busboom, J. R., 936
Busch, D. C., 83, 553, 1519, 1808
Bush, L. P., 1021
Buskirk, D. D., 73, 2531
Buttazzoni, L., 3300
Buttrey, B. S., 2539

C

Cai, W., 287
Cailleau-Audouin, E., 2888
Calkins, C. R., 949, 967, 972, 1200, 1904, 2690
Calsamiglia, S., 378, 419, 702, 1446, 3045
Calvert, C. C., 483, 1124
Cañón, J., 278, 545
Cant, J. P., 2288
Carciofi, A. C., 2237
Cardot, J.-M., 1156
Cardozo, P. W., 702, 3045
Carleos, C., 278
Carlson, D. B., 2415
Carnagey, K. M., 1637, 1649
Carnier, P., 2486
Carolino, M. I., 2496
Carolino, N., 47, 2496
Carr, S. N., 2711, 3544
Carr, T. P., 949
Carro, M. D., 1617
Carroll, J. A., 827, 1963
Carstens, G. E., 763, 2862
Carter, J. F., 3054
Carter, J. N., 3568
Casas, E., 2455
Case, L., 3245
Casellas, J., 2392
Casey, D. S., 287
Casper, D. P., 1533
Castillo, M., 94
Caton, J. S., 890, 1254, 2415, 3014
Cecchinato, A., 2486
Ceci, E., 1205
Centner, T. J., 3228
Centoducati, P., 1205
Cerrato-Sánchez, M., 378
Cervantes-Pahm, S. K., 1841
Chabot, C. D., 1263
Chabot, D. A., 1263
Chae, B. J., 1562
Chapman, P. L., 1658
Chartrin, P., 2888
Chase, C. C. Jr., 2016
Chen, C. Y., 2525
Chen, D. Y., 1106
Chen, J., 57, 2385
Chen, Y. F., 3224
Cheng, W. M., 3377
Cheng, W. T. K., 64, 3385
Cherdthong, A., 3497
Chiba, L. I., 333
Chilliard, Y., 2642
Chizzotti, F. H. M., 1173
Chizzotti, M. L., 1173, 1588
Choi, J. Y., 1562
Choi, Y. J., 3033
Chouinard, P. Y., 1624, 1678
Christophersen, C. T., 384
Chu, H. P., 2461
Chung, K. Y., 3418
Ciccioli, N. H., 2549
Clapham, W., 2032
Clapper, J. A., 564
Clark, R. T., 451
Cochran, R. C., 1372, 3079, 3089
Cohen, N. D., 1977
Coleman, S. W., 2016
Collier, R. J., 1132
Conde-Aguilera, J. A., 102
Confer, A. W., 3146
Connors, M. T., 2288
Connysson, M., 3465
Conway, L. K., 1263
Cook, B. J., 1963
Cook, D., 2761, 3608
Cooke, R. F., 2016, 2296
Corah, L. R., 3635
Corino, C., 1850
Corrigan, M. E., 632, 902, 2338, 2270
Corrigan, V. K., 1402
Costa, L. Nanni, 3300
Costa, H. E. C., 3424
Covey, T. L., 2005
Cowieson, A. J., 3432
Cranston, J. J., 3146
Crawford, G. I., 2998
Creighton, K. W., 451
Crombie, M. B., 2998
Cromie, A. R., 1047
Cromwell, G. L., 127, 2971
Crooker, B. A., 1132
Crowe, M. A., 1325
Culbertson, M., 2076, 2082
Cullen, N. G., 1038
Cumarasamy, S., 1402
Cummins, K. A., 390
Cummins, L. J., 804

Cunnick, J. E., 1316
Cupp, A. S., 476
Curtis, L. E., 780
Curtis, S. E., 511, 3137
Cutler, S. A., 2585

D

Dafoe, J. M., 3194
Dahlen, C. R., 3023
Dailey, J. W., 1963
Dalin, A.- M., 432
Daniel, J. A., 564, 2557
Daniels, M. J., 1316
Darroch, C. S., 333, 1573
Davis, K. C., 3194
Davis, M. E., 1459, 2862
Davoli, R., 3300
Dawson, L. J., 1245
Dayton, W. R., 3418
de Lange, C. F. M., 2156, 2168
De Palo, P., 1205
de Passillé, A. M., 2920
de Pedro, E., 1283
de Rodas, B. Z., 1459
De Smet, S., 1418
DeDecker, J. M., 3137
DeHaas, S., 1996
Dehority, B. A., 1395
Dekkers, J. C. M., 287
Delany, M. E., 3664
Delfa, R., 2369
Denis, S., 1156
de-Oliveira, L. D., 2237
Depenbusch, B., 923
Depenbusch, B. E., 632, 902, 2270, 2338, 3054
DePra, H. A., 3146
DeRouchey, J. M., 1556, 1579, 2228
Derr, J. N., 1977
Detweiler, G., 1245
Devant, M., 419
Devant, M., 1446
DiCostanzo, A., 923, 3023
Diez-Gonzalez, F., 3023
Dijkhuis, R. D., 3568
Dikeman, M. E., 167, 1191, 1669, 2697, 3557
Dilger, R. N., 1832
DiLorenzo, N., 3023
Ding, S. T., 64, 3377, 3385
Distl, O., 1503
Dixon, W. T., 2321
Dobbins, C. A., 2539
Dodson, M. V., 2795
Dohme, F., 1879
Dolf, G., 2480
Donkin, S. S., 1789, 3401
Doreau, M., 2642
Dounit, M. E., 73, 254, 2531
Dove, C. R., 333
Dove, C. R., 1573
Dozier, W. A. III, 602, 2962
Dritz, S. S., 1556, 1579, 1669, 2190, 2228, 3181
Drouillard, J. S., 167, 632, 640, 902, 923, 1182, 1382, 2338, 2401, 2270, 3054
Du, M., 960, 1296
Dubroeucq, H., 2723
Duckett, S. K., 3215
Duclos, M. J., 2888
Duff, G. C., 1426
Dugan, M. E. R., 2942, 3125, 3522
Duttlinger, A. W., 2228
Dvash, L., 1345

E

Ealy, A. D., 2296
Earley, B., 1325
Eastridge, M. L., 3511
Edwards, D. B., 241, 254
Eicher, S. D., 1232
Einstein, M. E., 460
Elam, N. A., 756, 1917, 2277, 2749
El-Kadi, S. W., 2277
Ellersieck, M. R., 858, 1519, 1808
Ellis, M., 511, 730, 3137
Elsasser, T. H., 1382
Elzo, M. A., 3315
Encinias, A. M., 2749
Engblom, L., 432
Engel, C. L., 1697
Engle, T. E., 205
Enns, R. M., 3348
Entz, T., 3125
Erickson, G. E., 949, 1223, 2998, 3504
Ernst, C. W., 241, 254
Esbenshade, K. L., 3235
Eskridge, K. M., 949
Esmailizadeh, A. K., 1038
Estell, R. E., 1478
Estellé, J., 3290
Estienne, M. J., 333
Eudy, J., 3279

F

Fabbri, L., 2952
Fàbrega, E., 2392
Fadel, J. G., 1984
Fahrenholz, A. C., 2228
Fan, M. Z., 909
Farran, T. B., 1382
Farrow, R. L., 1434
Faucitano, L., 1678
Feng, C. P., 820
Feng, J., 1781
Fernández, A. I., 1283
Fernández, I., 1291
Fernàndez de Sevilla, X., 2392
Fernández-Dueñas, D. M., 3544
Fernández-Fígares, I., 102
Fernando, R. L., 3324
Ferreira, A. V., 2627
Ferrell, C. L., 691, 2779, 3617
Ferret, A., 378, 419, 702, 1446
Field, T. G., 3533
Fievez, V., 3045
Fike, J. H., 2032
Filho, S. C. Valadares, 1173, 1588
Finocchiaro, R., 1758
Fiorentini, L., 2952
Firkins, J. L., 134
Fisher, A. D., 1690
Fiske, D., 2032
Fithian, W. A., 592
Fitzgerald, A. C., 1132
Flores, R., 1335
Fluharty, F. L., 1609, 2385
Fogarty, N. M., 804, 2068
Folch, J. M., 3290
Fontanesi, L., 3300
Fontenot, J. P., 2032
Ford, S. P., 820, 1296
Fortin, J., 1678
Fosgate, G. T., 1977
Fox, D. G., 660
Fox, J. T., 1182
Foxcroft, G., 1996
Fredrickson, E. L., 1478
Freeman, S. R., 146
Freetly, H. C., 370, 691
Freire, J. P. B., 2936
Freking, B. A., 2126
Fremaut, D., 1418
Fu, A., 1
Fuchimoto, D., 3367
Fuentetaja, A., 1410
Fulton, R. W., 3146
Funston, R. N., 451, 476

G

Gadberry, M. S., 999
Gagné, F., 1598
Gaillard, C., 2480
Gaines, A. M., 324
Gallaher, D. D., 2568
Gallego, J. L., 545
Gallo, L., 2486
Galvani, D. B., 3480
Galvano, F., 2952
Galyean, M. L., 756, 1035, 1711, 1951, 1963, 2005, 2756
Gama, L. T., 47, 2496
García, D., 545
Garcia, F., 1156, 2872
Garcia, L. G., 3533
García-Belenguer, E., 1933
Gardner, D. R., 2761, 2771, 3608
Garrett, A. J., 3315
Garrick, D. J., 815
Gasa, J., 94, 1156
Gaspar, A. M., 2936
Gatta, P. P., 2952
Gaughan, J. B., 226
Gauly, M., 220
Gaunt, G. M., 804
Geary, T. W., 553, 768
Genina, O., 1306
Gerrard, D. E., 1925
Gervais, R., 1624
Gianola, D., 3358
Gibson, M. L., 112, 2338
Giesting, D. W., 836
Gil, F., 3290
Gilbert, E. R., 2135
Giles, L. R., 1096
Gill, D. R., 3146
Gill, R. K., 923
Gilmour, A. R., 804, 1081
Ginja, C., 2496
Giraldo, L. A., 1617
Girard, C. L., 1678
Givens, D. I., 197
Glasser, T., 1345
Gleghorn, J. F., 1917
Gnad, D. P., 3079
Goachet, A. G., 316
Gobert, J., 339
Goddard, M. E., 2089
Godet, E., 2888
Goetsch, A. L., 1245
Golden, J. W., 180
Goll, D. E., 1426
Gomez-Raya, L., 17
Gondret, F., 2115
Gonyou, H. W., 982
Gonzalez, J. M., 3568
González, L. A., 419, 1446
Goodband, R. D., 1556, 1579, 2190, 2228, 3181
Gordon, M. E., 576, 3424
Gorocica-Buenfil, M. A., 1609
Goyache, F., 1291
Grant, A. C., 73, 2531
Green, B. T., 2761
Green, C., 197
Greenwood, S. L., 2651
Gregorini, P., 1006
Grellman, L., 17
Griffin, D. B., 3533
Grilli, E., 2952
Grings, E. E., 768
Grobbel, J. P., 1191, 2697
Groesbeck, C. N., 2228
Grove, A. V., 134
Gruber, S. L., 205
Guan, H., 3224
Guenter, W., 848
Guillerm-Regost, C., 2115
Guitton, N., 2115
Gunter, S. A., 999, 1006, 2043
Guo, J., 1781
Gutzwiller, A., 1879
Gwartney, B. L., 1904

H

Haak, L., 1418
Hackmann, T. J., 2344
Haden, J. K., 1519
Haga, S., 1526
Hahm, K.-S., 1562
Hahn, M., 1996
Hahn, T.-W., 1562
Hale, D. S., 3533
Hales, K. E., 2005
Hall, J. B., 2032
Hall, J. O., 738
Hallford, D. M., 1254, 1335
Hamann, H., 1503
Hamling, A. E., 967, 972, 1200
Hammer, C. J., 2415
Han, X. F., 1164
Han, Z. M., 1106
Hansen, S. L., 173
Harmon, D. L., 2277
Harper, A. F., 333
Harris, H. L., 476
Harstad, O. M., 3062
Hartsock, T. G., 2596
Hasebe, H., 2821
Hasky-Negev, M., 1306
Hatfield, P. G., 3194
Hathaway, M. R., 3418
Haub, M. D., 1669
Hayashi, T., 2821
Haydon, K. D., 1533
Hayes, B. J., 2089
Hazelton, S. R., 3401
He, M. L., 3125
Heckendorn, F., 1879
Hedemann, M. S., 2217
Heldt, J. S., 1372
Hendriks, W. H., 1145, 1402, 2979
Henshall, J. M., 1081, 1690
Hentges, E., 3575
Hernández-Jover, M., 472
Herring, W., 2076, 2082
Herrmann-Hoesing, L. M., 1468
Hertzberg, H., 1879
Hess, B. W., 820, 1296
Hess, H. D., 1879
Hess, T. W., 999
Hessel, E. F., 3600
Hickey, J. M., 1047
Hidaka, S., 40, 3551
Higgins, J. J., 1382, 2270, 3054
Hill, A. R., 720

Hill, D. A., 584
Hill, G. M., 112
Hill, W. G., 2508
Hilton, G. G., 211, 413
Hiss, S., 2903
Hodate, K., 1799
Hodgen, J. M., 1904
Hoehler, D., 2180
Hofer, A., 2480
Hoffman, T. W., 3533
Hoge, M. D., 241, 254
Holl, J., 2076, 2082
Holl, J. W., 1765
Holligan, S., 909
Hollis, G. R., 511
Holt, S. M., 226
Holyoake, P. K., 472
Honavar, V., 1485
Honeyman, M. S., 602, 2962
Hoover, L., 3575
Horn, G. W., 2424
Horst, R. L., 1637, 1649
Hou, J., 3224
Houdijk, J. G. M., 1891
Howe, J. C., 3575
Htoo, J. K., 2942
Hu, Z.-L., 1485
Huang, C. Y., 2461
Huang, J. C., 1106
Hubbell, D. S. III, 999, 2043
Huff-Lonergan, E. J., 1637, 1649
Hughes, L. M., 1485
Huhtanen, P., 651, 2657
Hunt, C. W., 134
Hunt, M. C., 1191, 2697, 3557
Huntington, G. B., 146, 159

I

Ibrahim, R. M., 1426
Ingham, V. M., 804
Ireland, J. J., 2445, 2797
Irion, R., 3586, 3593
Iwamoto, M., 3367

J

Jacob, M. E., 1182
Jansson, A., 3465
Janz, J. A. M., 1145, 1402
Jeaurond, E. A., 2156, 2168
Jenkins, T. C., 397
Jennen, D. G. J., 795
Jenschke, B. E., 949, 972, 1200, 2690
Jensen, B. R., 992
Jensen, D., 1271
Jensen, T., 2730
Ji, F., 1533
Jiang, Y. N., 2461
Jiang, Z., 57
Jin, H., 3033
Jin, Y. C., 3033
Jin, Z., 1562
Jobgen, S. C., 820
Jobgen, W. S., 820
Johnson, A. K., 3628
Johnson, B. J., 2401, 3418
Johnson, D. D., 1904, 3568
Johnson, H. A., 483
Johnson, K. A., 2738
Johnson, R., 1036
Johnson, R. K., 2525, 3279
Johnson, S. E., 3568.
Johnson, Z. B., 1459, 1573, 2711
Johnston, L. J., 2568, 2576
Jondreville, C., 1598
Jones, A. K., 197
Jones, C., 999
Jones, K. L., 1114
Jones, T. J., 1372
Joo, J. W., 1562
Jørgensen, H., 2208
Jouany, J.-P., 339, 2642
Joy, M., 2369
Ju, Y. T., 2461
Julius, S. L., 890
Julliand, V., 316, 339, 3465
Juniper, D. T., 197, 3100
Jurie, C., 2872

K

Kababya, D., 1345
Kachman, S. D., 2525
Kadzere, C. T., 1861
Kallenbach, R. L., 780, 2670
Kanis, E., 1067
Kannan, G., 2328
Karges, K., 112
Karges, K. K., 2338
Karlengen, I. J., 3062
Kasuya, E., 1799
Kato, T., 40
Katoh, K., 1526
Kattesh, H. G., 1316, 2913
Kawamura, T., 2821
Ke, M. W., 2461
Keane, M. G., 1047
Kearney, J. F., 3338
Kebreab, E., 2738
Keeler, C. D., 2998
Keisler, D. H., 83
Kelly, J. M., 3586, 3593
Kelly, N., 909
Kendall, D. C., 324
Kenny, D. A., 1047
Kerley, M. S., 180, 2670
Kerr, B. J., 442, 602, 871, 2377, 2585, 2962
Kessel, S., 2903
Khatib, H., 25, 2063
Kidd, M. T., 602
Killefer, J., 730, 3544
Kim, K. H., 3033
Kim, S. C., 882
Kim, S. W., 827, 1861, 2609
Kim, T. G., 3033
Kim, Y. J., 3033
King, S. S., 1114
Kirch, B. H., 1021
Kirkpatrick, D. L., 112
Kirkpatrick, J. G., 3146
Kitts, S. E., 2277
Klemetsdal, G., 33
Klopfenstein, T. J., 451, 949, 1223, 3504
Klotz, J. L., 1021
Knock, R. C., 3557
Knol, E. F., 1067, 3330
Kobayashi, E., 2821, 2833
Kobayashi, Y., 1526
Koets, A. P., 3440
Kojima, C. J., 2913
Koketsu, Y., 3159
Kolath, W. H., 180
Koohmaraie, M., 1765, 3617
Koser, S. L., 3401
Kott, R. W., 3194
Kouakou, B., 2328
Kozloski, G. V., 3480
Kramer, J. K. G., 187, 3522
Kranzler, G., 211
Kraus, D., 1996
Krause, D. O., 836
Krehbiel, C. R., 1868, 2998, 3146
Kreuzer, M., 1879, 2357
Kronberg, S., 2310
Krueger, N. A., 882
Krueger, W. K., 882
Kuchida, K., 40, 2821, 3551
Kuecker, W. G., 3586, 3593
Kuehn, L. A., 526, 536, 2103
Kumar, S. T. Bharani, 1495
Kung, M. S., 2461
Kushibiki, S., 1799
Kutz, B. R., 2711
Kyriazakis, I., 1891

L

LaBrune, H. J., 167
Lachica, M., 102
Lafrenière, C., 1624, 1678
Lagakos, W. S., 3424
Lalman, D. L., 1868, 2549
Lamb, G. C., 2296, 2539, 3023
Lambe, N. R., 1737
Lammers, P. J., 602, 2962
Lancaster, P. A., 2862
Landau, S., 1345
Langendijk, P., 3440
Lardy, G. P., 3014
Larson, J. E., 3023
Latour, M. A., 1789, 1933
Latorre, R., 3290
Laudert, S. B., 205
Laursen, B., 992
Lawrence, T. E., 1434, 3533
Lay, D. C. Jr., 1316, 3110, 3166
Lázaro, R., 119
Le Bellego, L., 2936
Le Bihan-Duval, E., 2888
Le Floc'h, N., 3473
Leão, M. I., 1173
Lee, C., 1690
Lee, H. G., 3033
Lee, H. S., 2609
Lee, S. T., 2771
Leeds, T. D., 1468, 3203, 2024, 1468
Legleiter, L. R., 173, 3069
Leheska, J. M., 3575
Lehmkuhler, J. W., 712
Lei, Z. L., 1106
Leibovich, J., 2005
Leighton, E., 2480
Leitman, N. R., 1519, 1808
Lents, C. A., 748, 2549
Levasseur, P., 2557
Lewis, G. S., 2024, 3203
Lewis, R. M., 526, 536
Li, C., 1
Li, F. D., 3432
Li, K. Y., 2461
Li, P., 820
Li, S. H., 2461
Li, S. Y., 2609
Li, Q. Y., 3224
Li, Z. H., 3033
Liao, S. F., 620
Lim, H. T., 1562
Lin, E. C., 3385
Lindberg, J. E., 3465
Lindemann, M. D., 333, 2971
Link, J. E., 112
Linneen, S. K., 1556, 1579
Lippolis, J. D., 2430
Lisle, A., 226
Listrat, A., 2872
Littell, R. C., 882
Liu, B. H., 3377
Liu, H. C., 3069
Liu, J., 1781
Liu, N., 3432
Liu, P., 2609
Lloyd, K. E., 173
Lôbo, R. B., 2840
Loe, E. R., 632, 902, 2270, 2338
Loerch, S. C., 1609
Lõest, C. A., 2627
Lonergan, S. M., 1637, 2585, 2962
Long, N., 3358
Long, T., 2076, 2082
Looper, M. L., 748, 1335
López-García, M. A., 1283
Lordelo, M. M., 2936
Loughin, T. M., 3181
Lourenço, M., 3045
Louveau, I., 2115
Lowe, J., 1996
Loy, T. W., 3504
Loya-Olguin, F., 2749
Lucy, M. C., 83, 1808
Lundeheim, N., 432
Lupton, C. J., 3252
Lusby, K. S., 2043
Luther, J. S., 2415
Lyons, J. G., 2862

M

Maas, J. A., 483
MacDonald, J. C., 3504
MacHugh, D. E., 3338
Macken, C. N., 3504
MacNeil, M. D., 768, 2471, 2518
Mader, T. L., 226
Mahajan, A., 2585
Mahan, D. C., 127, 460, 584, 2247, 2261
Main, R. G., 2190
Males, J. R., 3235
Mallory, D. A., 1519, 1808
Maltecca, C., 2063
Mandell, I. B., 1678
Manso Filho, H. C., 3424
Manteca, X., 419, 1446
Manzanilla, E. G., 1156
Marchant Forde, J., 1232
Marchant-Forde, J. N., 3110, 3166
Marchello, J. A., 1426
Mares, S. W., 1426
Marini, J. C., 660
Marks, D. L., 2557
Martel, C. A., 2539
Martin, J. L., 451
Martin, C., 2642
Martinez, A. M., 2496
Martínez, R. A., 545
Martínez-Ramírez, H. R., 2156, 2168
Martín-Orúe, S. M., 94
Maruyama, S., 3551
Mateo, R. D., 827
Mateos, G. G., 119, 1410
Mathis, C. P., 1372, 2627
Matte, J. J., 1598
Matthews, J. C., 620, 2651
Matzat, P. D., 2711
Maxwell, C. V., 1459, 1573, 2711
May, M. L., 902, 3054
McAllister, T. A., 3522
McBride, B. W., 187, 720, 909, 2651
McDaneld, T. G., 2897

McGinnis, L. M., 1819
McGlone, J. J., 3628
McKeever, K. H., 576, 3424
McKeith, F. K., 511, 730, 3544
McKinney, L. J., 2228
McLeod, K. R., 2277
McMahon, C. D., 2557
McMeniman, J. P., 1951, 2005
McMunn, K. A., 1316, 3110, 3166
Mc Parland, S., 3338
McPhee, M. J., 1984
Means, W. J., 960
Medel, P., 1410
Medina, B., 339
Medrano, J. F., 3315, 366[4]
Melchior, D., 3473
Mendes, C. Q., 3511
Mendizabal, J. A., 3393
Mendoza, O., 3137
Menéndez-Buxadera, A., 278
Meng, X., 2942
Mercadante, M. E. Z., 2840
Merks, J. W. M., 3330
Mersmann, H. J., 64, 3377, 3385
Metzler, B. U., 1544
Meunier, J. P., 1156
Meuwissen, T. H. E., 1089, 2447
Meyer, A. M., 2670
Meyer, H. H. D., 2903
Micol, D., 2872
Middleton, T. F., 146
Miles, J. R., 2126
Miller, D. N., 3617
Miller, J. E., 2328
Miller, M. F., 2005, 3575, 3586, 3593
Miller, P. S., 1861
Milliken, G. A., 1191, 2697
Mínguez, C., 515
Minton, J. E., 1232, 1382
Mir, P. S., 3125, 3522
Mishra, B., 1495
Misumi, S., 2821
Misztal, I., 267, 1057, 1514, 2076, 2082
Mitloehner, F. M., 3628
Mitsuhasi, T., 2821
Moate, P. J., 397
Moehn, S., 364
Moffet, C. A., 2024, 3203
Moll, X., 1156
Monegue, H. J., 2971
Monson, R. L., 2063
Monsonego Ornan, E., 1306
Montano, M., 916
Montelongo, M. A., 3146
Montgomery, S. P., 640
Moon, H. K., 827
Moore, D. A., 2328
Moore, E. S., 3054, 3089
Moore, S. M., 592
Moore, S. S., 1
Moors, E., 220
Morel, P. C. H., 1145, 1402
Moreno, M. Ruiz, 1364
Morgan, J. B., 211, 413, 3533
Morris, C. A., 1038
Morrison, M., 2385
Morrow, J. L., 3628
Mosenthin, R., 1544
Moser, R. L., 2576
Mosjidis, J. A., 2328
Mosley, E. E., 397
Mourot, J., 1850
Mousel, M. R., 1468, 3203
Muhonen, S., 3465
Muklada, H., 1345
Mul, A. J., 2990
Mulder, H. A., 1047
Müller, R., 1215
Murani, E., 795
Murdoch, B. M., 1
Murphy, C. M., 3137
Murphy, M. R., 660
Musella, M., 1850
Musgrave, J. A., 451
Myers, A. J., 3544
Myrie, S. B., 609

N

Nade, T., 2821
Nagamine, Y., 2833
Nagaraja, T. G., 632, 640, 1182
Nakagawa, T., 2821
Nakahashi, Y., 3551
Nakane, S., 2821
Narayanan, R., 17
Narayanan, S. K., 1182
Nardon, R. F., 1770
Nath, M., 1747
Nathanielsz, P. W., 820
Nelson, M. L., 936
Nelssen, J. L., 1556, 1579, 2190, 2228, 3181
Neville, T. L., 890, 1254, 2415
Newman, S., 2525
Newton, G. L., 3228
Ngu, N. T., 795
Nichols, W. T., 2005
Nicholson, K. L., 3533
Nicoll, G. B., 3348
Nielsen, B. D., 3166
Nienaber, J. A., 370
Nieto, R., 102
Nieuwhof, G. J., 536
Nirasawa, K., 2821
Nkrumah, J. D., 1
Noguera, J. L., 3290
Nolte, J. van E., 2627
Nortey T. N., 3450,
Northcutt, S. L., 2518
Notter, D. R., 526, 536, 3203
Nunnery, G. A., 2998
Nyachoti, C. M., 836, 848

O

O'Fallon, J. V., 936
O'Neil, M. R., 3014
Oba, M., 2321
Obara, Y., 1526
Ødegård, J., 33
Odongo, N. E., 720, 2651
Oh, Y. K., 3033
Ohtani, Y., 1526
Okomo-Adhiambo, M., 17
Okumura, T., 2821
Oliveira, M. C. C., 2237
Olson, KC, 1372, 2539
Oltjen, J. W., 1984, 2779
Onishi, A., 3367
Onofre, G., 545
Orellana, D. G., 511, 3137
Oresanya, T. F., 348
Or-Rashid, M. M., 187
Ortiz-Colòn, G., 73, 2531
Osawa, T., 40
Osborne, V. R., 720
Osterstock, J. B., 1977
Ots, M., 651
OuYang, Y. C., 1106
Ovilo, C., 1283
Owens, F. N., 2680

P

Paape, M. J., 748
Packer, I. U., 1770, 3511
Pahm, A. A., 2180
Pakdee, P., 3497
Palmer, G. H., 2797
Pampusch, M. S., 3418
Panter, K. E., 2761, 2771, 3608
Pape, D., 2738
Paradis, C., 1624
Park, Y. K., 1562
Parks, C. W., 3544
Parr, S. L., 3418
Parrott, T., 1459
Parsons, G. L., 2401
Pascual, M., 3409
Pasternak, A., 1996
Patience, J. F., 348, 2942, 3450
Patra, A. K., 1245
Patten, L. E., 1904
Patterson, D. J., 83, 553, 1519, 1808
Patterson, H. H., 1697
Patterson, J., 1996
Patterson, J. A., 1232, 2952
Pavan, E., 3215
Pavlicevic, J., 3491
Payton, M. E., 3146
Pedersen, C., 2180
Pedersen, L. J., 2730
Peinado, J., 1410
Pellikaan, W. F., 2979
Pereira, D. H., 1173
Pereira, G. T., 2237
Pereira, O. G., 1173
Perevolotsky, A., 1345
Pérez, J., 545
Pérez, J. F., 94, 1156
Pérez-Enciso, M., 3290
Pérez-Pardal, L., 1291
Pérez-Serrano, M., 119
Perry, B. L., 2928
Perry, D., 1984
Perry, G. A., 1697, 2928
Pesti, G. M., 500
Peters, J. C., 2247, 2261
Peterson, B. A., 3137
Petry, D. B., 3279
Pettigrew, J. E., 1533
Pfister, J. A., 2761, 2771, 3491, 3608
Phillips, W. A., 2424
Phipps, R. H., 197, 3100
Piao, X. S., 2609
Picard, B., 2872
Pires, A. V., 3511
Pires, C. C., 3480
Pitchford, W. S., 1038
Piva, A., 2952
Pizzamiglio, V., 2952
Pla, M., 3409
Plascencia, A., 2680
Platter, W. J., 205
Pomar, C., 1598
Pomiès, D., 2723
Ponsuksili, S., 795
Poore, M. H., 146
Poppi, D. P., 2288
Prada, F., 2237
Prayaga, K. C., 1081, 1690
Price, D. M., 211, 413
Priest, K., 17
Provenza, F. D., 738, 3491
Prusa, K. J., 205, 2962
Puchala, R., 1245
Purchas, R. W., 1145, 1402
Purroy, A., 3393
Purser, K. W., 2971
Qiu, X., 2016

Q

Qu, A., 2585
Quinn, M. J., 902, 2270, 2338, 2401, 3054

R

Rademacher, M., 364
Radhakrishnan, S., 720
Raes, K., 1418
Raines, C. R., 3557
Rakes, L. K., 2711
Ramírez, G., 3290
Ramos, S., 1617
Ramos-Morales, E., 3100
Raney, N. E., 241, 254
Ranilla, M. J., 1617
Rathmann, R. J., 2005
Rauw, W. M., 17
Razook, A. G., 1770
Redmer, D. A., 890, 1254, 2415
Reecy, J. M., 1485
Reed, J. J., 890, 1254, 2415
Regmi, P. R., 2321, 2619
Rehberger, T., 1459
Reicks, A. L., 3586, 3593
Reiners, K., 3600
Reinhardt, C. D., 167, 902, 1382
Reinhardt, T. A., 2430
Rekaya, R., 2471
Remmenga, M. D., 1478
Ren, G. P., 1164
Renquist, B. J., 1124
Renter, D. G., 1182
Renteria-Flores, J. A., 2568, 2576
Resende, F. D., 1770
Respondek, F., 316
Reuter, R. R., 1963, 2005
Reynolds, L. P., 890, 1033, 1254, 1709, 2415, 2445, 3014
Ribeiro, F. R. B., 763, 2862
Richert, B. T., 1789, 3110, 3166
Richeson, J. T., 999
Riggio, V., 1758
Rincker, M. J., 112
Rincker, P. J., 730
Rincon, G., 3315
Rink, A., 17
Rinne, M., 651, 2657
Ritter, M. J., 511, 3137
Roberts, A. J., 476, 768
Roberts, C. A., 780
Roberts, M. P., 1316, 2913
Roberts, R. M., 2797
Rodehutscord, M., 1544
Rodrigues, G. H., 3511
Rodríguez, M. C., 1283
Rogosic, J., 3491
Rohrer, G. A., 1765
Rojo, A., 3137
Rorie, R. W., 1335
Rosa, G. J. M., 241, 3358
Rosenkrans, C. F. Jr., 1335
Rosenstein, D. S., 3166
Ross, C. F., 936
Rothschild, M. F , 2585
Rouel, J., 2642
Roussel, A. J., 1977

Royo, L. J., 1291
Ru, Y. J., 3432
Ruiz Moreno, M., 1364
Ruíz-de-la-Torre, J. L., 419, 1446
Rushen, J., 2920
Russo, V., 3300
Rust, S. R., 211
Rutledge, J. J., 2063
Rutten, P. G. P., 2979

S

Saburi, J., 2821
Sahlu, T., 1245
Sainz, R. D., 1984
Saito, K., 2821
Salim, H., 909
Salinas-Chavira, J., 916
Salisbury, B. A., 2508
Sampson, J. D., 2344
Sánchez, J. P., 267, 515, 1057, 2076, 2082
Sands, J. S., 848, 3450
Santos, V. A. C., 1943
Sapp, R. L., 2471
Sargeant, J. M., 632
Sartin, J. L., 2557
Sasaki, Y., 3159
Sato, S., 2833
Sauer, W. C., 609, 2619
Sauerwein, H., 2903
Savell, J. W., 3533
Sawalha, R. M., 1737
Sawyer, J. T., 2711
Scaglia, G., 2032
Scanga, J. A., 1658, 3533
Schafer, D. J., 553, 1519
Schaferm, D. J., 1519
Scharenberg, A., 1879
Schellander, K., 795
Schelling, C., 2480
Schembri, N., 472
Schenck, E. L., 3166
Schichowski, C., 220
Schinckel, A. P., 460, 1789
Schlegel, P., 173, 2990
Schlipf, J. M., 511, 3137
Schneider, M. del P., 432
Scholljegerdes, E., 2310
Schreurs, N. M., 2872
Schroeder, A. L., 205
Schutzkus, V., 2063
Schwartzkopf-Genswein, K. S., 1215
Schwarz, F. J., 2903
Scotti, E., 3300
Scramlin, S. M., 3544
Seidel, G. E. Jr., 2445
Seki, S., 3551
Sellick, G. S., 1038
Sembon, S., 3367
Seppälä, A., 651, 2657
Serena, A., 2208, 2217
Serenius, T., 3324
Sève, B., 3473
Shackelford, S. D., 1765, 3617
Shah, M. A., 1215
Shaik, S. A., 2328
Shan, T., 1781
Shelton, J. L., 2596
Shen, L. X., 1164
Shen, S. B., 1164
Shen, Y. B., 2609
Sherman, E. L., 1
Shi, L. H., 1106
Shibata, T., 2833
Shinde, P. L., 1562
Shingu, H., 1526
Shipp, T. E., 584
Shirley, K. L., 815
Shoveller, A. K., 364, 2651
Shriver, B., 3575
Shurson, G. C., 2377, 2568, 2576
Sibut, V., 2888
Silió, L., 1283
Silva, F. S., 2496
Silva, S. R., 1943
Silver, G. A., 3315
Simsa, S., 1306
Sindt, J. J., 640
Smith, G. C., 1658, 3533
Smith, M. F., 83, 553, 1519, 1808
Snelling, W. M., 2103
Snow, J. L., 1556
Snowder, G. D., 2455
Solaiman, S. G., 390
Solberg, T. R., 2447
Sollenberger, L. E., 882
Sonesson, A. K., 1089, 2447
Soret, B., 3393
Soto-Navarro, S. A., 890, 1254, 1263, 2749
Sousa, M. C. O., 2496
Southern, L. L., 1573
Sowell, B. F., 3194
Spain, J. N., 2344
Spangler, D. A., 1533
Spangler, M. L., 2471
Spears, J. W., 173, 1357, 3069
Spicer, L. J., 2549
Spiehs, M. J., 3617
Spivey, K. S., 1434
Spurlock, D. M., 2897
Stahl, C. H., 592, 2585
Stalder, K. J., 592, 3324
Staples, C. R., 882
Steele, B. P., 2557
Stegelmeier, B. L., 2761
Stein, H. H., 1819, 1841, 1861, 2180
Steinheim, G., 33
Stellflug, J. N., 2024
Stelzleni, A. M., 1904
Step, D. L., 3146
Stephens, J. W., 1669
Sterk, A., 2990
Stern, M. D., 1364
Stevenson, J. S., 2539
Stiening, C. M., 1132
Stoffregen, W. C., 2962
Stormshak, F., 299
Stouffer, J. R., 763
St-Pierre, N., 2385
Strandberg, E., 432, 2853
Street, B. R., 982
Strickland, J. R., 1021
Stroehl, M., 2903
Stroshine, R. L., 3166
Subbiah, J., 211
Suda, Y., 2833
Sugimoto, Y., 2821
Sun, Q. Y., 1106
Sun, T., 2913
Sun, Z. H., 1164
Susin, I., 3511
Sutoh, M., 1799
Suzuki, K., 2833
Suzuki, S., 3367
Swain, D. L., 1081
Swanson, K. C., 909, 2651
Swanson, T. J., 2415
Swecker, W. S. Jr., 2032
Swedberg, B. J., 2690
Swyers, K. L., 2596

T

Takagi, M., 1526
Takahashi, T., 1526
Tan, Z. L., 1164
Tang, S. X., 1164
Tantia, M. S., 1495
Tateo, A., 1205
Tatum, J. D., 205, 1658, 3533
Taugbøl, O., 3062
Taverne, M. A. M., 3440
Tayama, T., 2833
Taylor, C. C., 2277
Taylor, J. B., 890, 1254, 2415
Taylor-Pickard, J. A., 94
Tayo, G. O., 1164
Tedeschi, L. O., 763, 1173, 1588, 1770
Teixeira, A., 2369
Tejido, M. L., 1617
Tempelman, R. J., 241, 2531
Terrill, T. H., 2328
Tesfaye, D., 795
Tesseraud, S., 2888
Thain, D., 17
Thallman, R. M., 2103
Theilgaard, P., 515
Théwis, A., 680
Thomas, M. G., 3315
Thompson, V. F., 1426
Thompson, L. D., 3575
Thomson, D. U., 1917, 3054
Thorup, V. M., 992
Thrune, M., 1364
Tibau, J., 2392
Titgemeyer, E. C., 640, 1372, 3079, 3089
Tokach, M. D., 1556, 1579, 1669, 2190, 2228, 3181
Tolkamp, B. J., 1891
Tong, A., 1306
Tong, J., 1296
Torell, R., 17
Toribio, J-A. L. M. L., 472
Toro, M. A., 3290
Torrey, S., 1439
Toscano, M. J., 1316
Toth Tamminga, E. L. M., 1439
Trabue, S. L., 2377
Trenkle, A., 564, 1637, 1649
Trottier, N. L., 3450
Tsuruta, S., 1514, 2076, 2082

U

Ubbink-Blanksma, M., 2990
Uemoto, Y., 2833
Undersander, D. J., 712
Underwood, K. R., 960, 1296
Ungar, E. D., 1345
Ungerfeld, E. M., 2596
Unruh, J. A., 1669, 3557
Usry, J. L., 324

V

Valadares Filho, S. C., 1173, 1588
Valencia, D. G., 119
Valkeners, D., 680
Vallet, J. L., 2126
van Arendonk, J. A. M., 2845
Van den Weghe, H. F. A., 3600
van der Poel, A. F. B., 2979
van der Waaij, E. H., 2853, E. H., 3330
Van Genugten, P., 511
van Haard, P., 3440
Van Laere, M., 680
van Nes, A., 3440
Van Vleck, L. D., 2525
Van Walleghem, K., 1418
Vanguru, M., 2328
Vanoverbeke, D. L., 211, 413, 923, 3533
VanWagoner, H. C., 1271
Vanzant, E. S., 620, 2277
Varel, V. H., 3617
Vasconcellos, R. S., 2237
Vasconcelos, J. T., 756, 1711, 1951, 2005, 2756
Vázquez, J. M., 3290
Vázquez-Añón, M., 1951
Vedenov, D., 500
Veerkamp, R. F., 1047
Vega-Pla, J. L., 2496
Veissier, I., 2723
Vendramini, J. M. B., 2016
Verbyla, A. P., 1038
Vercoe, P. E., 384
Verheijden, J. H. M., 3440
Verstegen, M. W. A., 1067, 2979
Veum, T. L., 858
Vicente, A. A., 2496
Vicente, B., 119
Vijh, R. K., 1495
Villa, A., 278
Villalba, J. J., 738
Villanueva, B., 1737
Virgili, R., 3300
von Keyserlingk, M. A. G., 1215
Vonnahme, K. A., 1254, 2415, 3014

W

Waggoner, J. W., 2627
Wagner, C. G., 2557
Wagner, J. J., 2998
Walker, D. A., 2749
Walker, D. K., 2401
Walker, J. W., 1345
Wallace, R. J., 397
Wanapat, M., 3497
Wanapat, S., 3497
Wang, C. H., 2461
Wang, L., 2609
Wang, P. H., 3377, 3385
Wang, Q., 1106
Wang, X., 2063
Wang, Y., 1781, 2461
Wang, Y. C., 3377
Wang, Y. J., 909
Wang, Z., 1
Ward, M. A., 890, 1254
Watford, M., 3424
Watkins, K. B., 2043
Weaver, A. D., 1925
Webb, A. J., 2508
Webb, K. E. Jr., 1357, 2135
Webel, S. K., 1114, 2576
Weber, P. S. D., 1325
Weber, T. E., 442, 602, 871, 2377, 2585, 2962
Weber, W. J., 3418
Wegner, J., 57
Weigel, K. A., 3358
Weinmeister, R., 1271
Welch, K. D., 2761, 2771, 3608
Wellen, A., 1996
Wells, J. E., 3617
Welsh, T. H. Jr., 2862
Wertz-Lutz, A. E., 564, 1649
West, C. P., 2043

Wettemann, R. P., 748, 1868, 2549
Wheeler, T. L., 1765
White, F. J., 2549
White, H. M., 1789
White, M. E., 3418
White, S. N., 1468
Whitlock, B. K., 2557
Whitney, M. H., 2377
Wickersham, E. E., 3079, 3089
Wickersham, T. A., 3079, 3089
Widmer, M. R., 1819
Widowski, T. M., 1439
Wilburn, E. E., 584
Wilkinson, B. H. P., 1145, 1402
Williams, C. A., 576
Williams, J. L., 1232
Williams, N., 1996
Wilson, D. J., 1519, 1808
Wilson, K. R., 1951
Wilsson, E., 2853
Wimmers, K., 795
Winterholler, S. J., 2401
Wirth, T., 2738
Wiseman, T. G., 460
Woliński, J., 2952
Wolter, B. F., 3137
Wommer, T. P., 3480
Wong, E. A., 2135
Wood, M. A., 187
Woolliams, J. A., 1089, 1747, 2447
Woyengo, T. A., 848
Wright, A-D. G., 384
Wright, C. L., 1357
Wu, C. Y., 2461
Wu, G., 820, 827
Wu, M., 472
Wu, S. C., 64, 3385
Wu, T., 1781
Wulf, D. M., 1819
Wulster-Radcliffe, M. C., 1709
Wylie, A. R. G., 1891

X

Xia, D., 57
Xiao, W. J., 1164
Xu, B., 836
Xu, C. X., 3033
Xu, Z., 1781

Y

Yang, H., 584
Yang, X. J., 57
Yang, Y. X., 1562
Yayou, K., 1799
Yazdi, M. H., 1089
Yeo, J. M., 3033
Yin, J. L., 3033
Yin, S., 1106
Yip, B., 3125
Yonezawa, T., 1526
Yoon, S. Y., 1562
Young, M. G., 3181
Yu, Y. H., 64, 3385
Yu, Z., 2385

Z

Zabielski, R., 2952
Zaitoun, I., 25
Zaralis, K., 1891
Zerby, H. N., 3203
Zhao, R. Q., 57
Zhou, C. S., 1164
Zhu, M. J., 1296
Ziemer, C. J., 871, 2377
Zijlstra, R. T., 2619, 2942, 3450
Zinn, R. A., 916, 2680
Zollinger, B. L., 1434
Zou, M., 1145
Zuelke, K. A., 2126
Zumbach, B., 2076, 2082

Subject index for Volume 86
(January through December 2008)

A

α-amylase
Pancreatic mass, cellularity, and α-amylase and trypsin activity in feedlot steers fed diets differing in crude protein concentration, 909
accuracy
Estimation of accuracy and bias in genetic evaluations with genetic groups using sampling, 1047
Evaluation of methods for computing approximate accuracies of predicted breeding values in maternal random regression models for growth traits in beef cattle, 1057
accuracy of selection
Genomic selection using different marker types and densities, 2447
acetate
Effects of oral administration of sodium citrate or acetate to pigs on blood parameters, postmortem glycolysis, muscle pH decline, and quality attributes of pork, 1669
acetate:propionate ratio
In vitro methane emission and acetate:propionate ratio are decreased when artificial stimulation of the rumen wall is combined with increasing grain diets in sheep, 384
acidosis
ASAS Centennial Paper: Contributions in the *Journal of Animal Science* to understanding cattle metabolic and digestive disorders, 1711
Effect of the magnitude of the decrease of rumen pH on rumen fermentation in a dual-flow continuous culture system, 378
Effects of calcium magnesium carbonate and roughage level on feedlot performance, ruminal metabolism, and site and extent of digestion in steers fed high-grain diets, 2998
acute phase protein
Effects of preshipping management on measures of stress and performance of beef steers during feedlot receiving, 2016
adaptation
Intake and digestion of wheat forage by stocker calves and lambs, 2424
adenosine monophosphate-activated protein kinase
Adenosine monophosphate-activated protein kinase involved in variations of muscle glycogen and breast meat quality between lean and fat chickens, 2888
adenosine triphosphatase
Effect of diet containing phytate and phytase on the activity and messenger ribonucleic acid expression of carbohydrase and transporter in chickens, 3432
adipocyte
Regional differences in porcine adipocytes isolated from skeletal muscle and adipose tissues as identified by a proteomic approach, 2115
adipocyte differentiation
Docosahexaenoic acid regulates adipogenic genes in myoblasts via porcine peroxisome proliferator-activated receptor γ, 3385
Ectopic expression of porcine peroxisome proliferator-activated receptor δ regulates adipogenesis in mouse myoblasts, 64
adipocyte fatty acid-binding protein
Docosahexaenoic acid regulates adipogenic genes in myoblasts via porcine peroxisome proliferator-activated receptor γ, 3385
adipogenesis
AMP-activated protein kinase and adipogenesis in sheep fetal skeletal muscle and 3T3-L1 cells, 1296
adiponectin
Docosahexaenoic acid regulates adipogenic genes in myoblasts via porcine peroxisome proliferator-activated receptor γ, 3385
Fasting regulates the expression of adiponectin receptors in young growing pigs, 3377
adiponectin receptor
Fasting regulates the expression of adiponectin receptors in young growing pigs, 3377
adipose tissue
Nonionophore antibiotics do not affect the *trans*-18:1 and conjugated linoleic acid composition in beef adipose tissue, 3522
The effect of vitamin A supplementation on postnatal adipose tissue development of lambs, 3393
adipose triglyceride lipase
Porcine adipose triglyceride lipase complementary deoxyribonucleic acid clone, expression pattern, and regulation by resveratrol, 1781
β-adrenergic receptor
Effect of feedlot management system on response to ractopamine-HCl in yearling steers, 2401
β-adrenergic receptor agonist
Effects of duration of zilpaterol hydrochloride feeding and days on the finishing diet on feedlot cattle performance and carcass traits, 2005
age
Protein elongation rates in tissues of growing and adult sheep, 2288
age verification
Predicting cattle age from eye lens weight and nitrogen content, dentition, and United States Department of Agriculture maturity score, 3557
aging
Effects of aging on beef chuck and loin muscles enhanced with ammonium hydroxide and salt, 1200
Effects of ractopamine supplementation and postmortem aging on longissimus muscle palatability of beef steers differing in biological type, 205
agouti-related protein
Central role of the melanocortin-4 receptors in appetite regulation after endotoxin, 2557
Agouti-signaling peptide
Technical note: A novel method for routine genotyping of horse coat color gene polymorphisms, 1291
Alentejana
Indicators of genetic erosion in an endangered population: The Alentejana cattle breed in Portugal, 47
alfalfa
Effect of intake level and alfalfa substitution for grass hay on ruminal kinetics of fiber digestion and particle passage in beef cattle, 134
algal meal
Supplemental algal meal alters the ruminal *trans*-18:1 fatty acid and conjugated linoleic acid composition in cattle, 187
alkaloid
The effect of body condition on serum concentrations of two teratogenic alkaloids (anagyrine and ammodendrine) from lupines (*Lupinus* species) that cause crooked calf disease, 2771
allometry
Effect of selection for growth rate on relative growth in rabbits, 3409
amino acid
Effect of dietary soybean oil and soybean protein concentration on the concentration of digestible amino acids in soybean products fed to growing pigs, 1841
Factors affecting the variability in ileal amino acid digestibility in corn distillers dried grains with solubles fed to growing pigs, 2180
Nutrient net absorption across the portal-drained viscera of forage-fed beef steers: Quantitative assessment and application to a nutritional prediction model, 2277
The effect of microbial phytase on true and apparent ileal amino acid digestibilities in growing-finishing pigs, 1598
amino acid absorption
BOARD-INVITED REVIEW: Peptide absorption and utilization: Implications for animal nutrition and health, 2135
amino acid digestibility
Effect of common antinutritive factors and fibrous feedstuffs in pig diets on amino acid digestibilities with special emphasis on threonine, 609
amino acid intake
Dynamics of body protein deposition and changes in body composition after sudden changes in amino acid intake: I. Barrows, 2156
Dynamics of body protein deposition and changes in body composition after sudden changes in amino acid intake: II. Entire male pigs, 2168

amino acid transport
Identification and expression pattern of cationic amino acid transporter-1 mRNA in small intestinal epithelia of Angus steers at four production stages, 620
ammodendrine
The effect of body condition on serum concentrations of two teratogenic alkaloids (anagyrine and ammodendrine) from lupines (*Lupinus* species) that cause crooked calf disease, 2771
ammonia
Effect of method of applying fibrolytic enzymes or ammonia to Bermudagrass hay on feed intake, digestion, and growth of beef steers, 882
Effects of ammonia load on glucose metabolism by isolated ovine duodenal mucosa, 2321
ammonium hydroxide
Enhancement of beef chuck and loin muscles with ammonium hydroxide and salt, 967
AMP-activated protein kinase
AMP-activated protein kinase and adipogenesis in sheep fetal skeletal muscle and 3T3-L1 cells, 1296
anagyrine
The effect of body condition on serum concentrations of two teratogenic alkaloids (anagyrine and ammodendrine) from lupines (*Lupinus* species) that cause crooked calf disease, 2771
analysis
Comparative sulfur analysis using thermal combustion or inductively coupled plasma methodology and mineral composition of common livestock feedstuffs, 2377
anemia
Effects of neonatal iron status, iron injections at birth, and weaning in young pigs from sows fed either organic or inorganic trace minerals, 2261
angiogenesis
Impacts of linseed meal and estradiol-17β on mass, cellularity, angiogenic factors, and vascularity of the jejunum, 3014
animal
Animal trait ontology: The importance and usefulness of a unified trait vocabulary for animal species, 1485
animal health
Assessment of the dynamics of microparasite infections in genetically homogeneous and heterogeneous populations using a stochastic epidemic model, 1747
animal science
ASAS Centennial Paper: Animal science teaching: A century of excellence, 3640
animal science department
INVITED REVIEW: Animal science departments of the future, 3235
ankyrin
Ankyrin repeat and suppressor of cytokine signaling (SOCS) box-containing protein (ASB) 15 alters differentiation of mouse C_2C_{12} myoblasts and phosphorylation of mitogen-activated protein kinase and Akt, 2897
anorexia
Changes in food intake and circulating leptin due to gastrointestinal parasitism in lambs of two breeds, 1891
antibiotic
Evaluation of alternatives to antibiotics using an *Escherichia coli* K88$^+$ model of piglet diarrhea: Effects on gut microbial ecology, 836
Nonionophore antibiotics do not affect the *trans*-18:1 and conjugated linoleic acid composition in beef adipose tissue, 3522
antibody
Effects of feeding polyclonal antibody preparations on rumen fermentation patterns, performance, and carcass characteristics of feedlot steers, 3023
antimicrobial activity
Potato (*Solanum tuberosum* L. cv. Gogu valley) protein as a novel antimicrobial agent in weanling pigs, 1562
antimicrobial feed additive
Effects of feeding wet corn distillers grains with solubles with or without monensin and tylosin on the prevalence and antimicrobial susceptibilities of fecal foodborne pathogenic and commensal bacteria in feedlot cattle, 1182
antimicrobial resistance
Technical note: Occurrence in fecal microbiota of genes conferring resistance to both macrolide-lincosamide-streptogramin B and tetracyclines concomitant with feeding of beef cattle with tylosin, 2385
antimicrobial susceptibility
Effects of feeding wet corn distillers grains with solubles with or without monensin and tylosin on the prevalence and antimicrobial susceptibilities of fecal foodborne pathogenic and commensal bacteria in feedlot cattle, 1182
antinutritional factor
Effect of common antinutritive factors and fibrous feedstuffs in pig diets on amino acid digestibilities with special emphasis on threonine, 609
apoptosis
Effect of continuous milking and prostaglandin E_2 on milk production and mammary epithelial cell turnover, ultrastructure, and gene expression, 1132
Appalachia
Forage systems for cow-calf production in the Appalachian region, 2032
apparent ileal digestibility
The effect of microbial phytase on true and apparent ileal amino acid digestibilities in growing-finishing pigs, 1598
artificial insemination
Timing of artificial insemination in postpartum beef cows following administration of the CO-Synch + controlled internal drug-release protocol, 1519
association
Sterol regulatory element binding transcription factor 1 expression and genetic polymorphism significantly affect intramuscular fat deposition in the longissimus muscle of Erhualian and Sutai pigs, 57
Australia
Technical note: Evaluation of the official identification system for pigs for sale in New South Wales, 472

B

backcross design
Combined detection and introgression of quantitative trait loci underlying desirable traits, 1089
backfat thickness
B-mode, real-time ultrasound for estimating carcass measures in live sheep: Accuracy of ultrasound measures and their relationships with carcass yield and value, 3203
bacon quality
Effects of temperature stress on growth performance and bacon quality in grow-finish pigs housed at two densities, 1789
bacteria
The effect of dietary phosphorus and calcium level, phytase supplementation, and ileal infusion of pectin on the chemical composition and carbohydrase activity of fecal bacteria and the level of microbial metabolites in the gastrointestinal tract of pigs, 1544
balance
Feeding distillers grains supplements to improve amino acid nutriture of lambs consuming moderate-quality forages, 691
baling method
Influence of slice baling on feeding value of alfalfa hay in receiving and finishing diets for feedlot cattle, 2749
barley
Prediction of in vivo apparent total tract energy digestibility of barley in grower pigs using an in vitro digestibility technique, 2619
Bayesian analysis
Genetic associations of sow longevity with age at first farrowing, number of piglets weaned, and wean to insemination interval in the Finnish Landrace swine population, 3324
Bayesian modeling
Familial and herd-level associations with paratuberculosis enzyme-linked immunosorbent assay status in beef cattle, 1977
beef
Caspase 3 is not likely involved in the postmortem tenderization of beef muscle, 960
Chemical and sensory properties of beef of known source and finished on wet distillers grains diets containing varying types and levels of roughage, 949
Chemical properties of cow and beef muscles: Benchmarking the differences and similarities, 1904
Corn oil or corn grain supplementation to steers grazing endophyte-free tall fescue. I. Effects on in vivo digestibility, performance, and carcass quality, 3215
Effect of dietary supplementation with selenium-enriched yeast or sodium selenite on selenium tissue distribution and meat quality in beef cattle, 3100

Effect of feeding high-temperature, microtime-treated diets with different lipid sources on conjugated linoleic acid formation in finishing Hanwoo steers, 3033
Effect of prebreeding body weight or progestin exposure before breeding on beef heifer performance through the second breeding season, 451
Effect of supplemental energy source and frequency on growing calf performance, 3504
Effect of vitamin A restriction on carcass characteristics and immune status of beef steers, 1609
Effects of aging on beef chuck and loin muscles enhanced with ammonium hydroxide and salt, 1200
Effects of conventional and grass-feeding systems on the nutrient composition of beef, 3575
Effects of different packaging atmospheres and injection-enhancement on beef tenderness, sensory attributes, desmin degradation, and display color, 2697
Effects of packaging atmospheres on beef instrumental tenderness, fresh color stability, and internal cooked color, 1191
Effects of ractopamine supplementation and postmortem aging on longissimus muscle palatability of beef steers differing in biological type, 205
Enhancement of beef chuck and loin muscles with ammonium hydroxide and salt, 967
Gonadotropin-releasing hormone-induced ovulation and luteinizing hormone release in beef heifers: Effect of day of the cycle, 83
Impact of beef cattle diets containing corn or sorghum distillers grains on beef color, fatty acid profiles, and sensory attributes, 923
Meta-analysis of the effect of animal maturity on muscle characteristics in different muscles, breeds, and sexes of cattle, 2872
Nonionophore antibiotics do not affect the *trans*-18:1 and conjugated linoleic acid composition in beef adipose tissue, 3522
Nutrient net absorption across the portal-drained viscera of forage-fed beef steers: Quantitative assessment and application to a nutritional prediction model, 2277
Predicting beef tenderness using near-infrared spectroscopy, 211
Recovering value from beef carcasses classified as dark cutters by United States Department of Agriculture graders, 1658
Sarcomere length influences postmortem proteolysis of excised bovine semitendinosus muscle, 1925
Technical Note: The USDA beef yield grade equation requires modification to reflect the current longissimus muscle area to hot carcass weight relationship, 1434
Tenderness, sensory, and color attributes of two muscles from the M. quadriceps femoris when fabricated using a modified hot-boning technique, 2690
Use of 25-hydroxyvitamin D_3 and dietary calcium to improve tenderness of beef from the round of beef cows, 1637
Use of 25-hydroxyvitamin D_3 and vitamin E to improve tenderness of beef from the longissimus dorsi of heifers, 1649
Using the near-infrared system to sort various beef middle and end muscle cuts into tenderness categories, 413

beef cattle
A new heat load index for feedlot cattle, 226
ASAS CENTENNIAL PAPER: Net energy systems for beef cattle—Concepts, application, and future models, 2779
BOARD-INVITED REVIEW: Use of distillers by-products in the beef cattle feeding industry, 1223
Comparison of alternative beef production systems based on forage finishing or grain-forage diets with or without growth promotants: 2. Meat quality, fatty acid composition, and overall palatability, 1678
Development and evaluation of empirical equations to interconvert between twelfth-rib fat and kidney, pelvic, and heart fat respective fat weights and to predict initial conditions of fat deposition models for beef cattle, 1984
Effect of dried corn distillers grains plus solubles compared with soybean hulls, in late gestation heifer diets, on animal and reproductive performance, 1697
Effect of method of applying fibrolytic enzymes or ammonia to Bermudagrass hay on feed intake, digestion, and growth of beef steers, 882
Effects of dietary energy source and level and injection of tilmicosin phosphate on immune function in lipopolysaccharide-challenged beef steers, 1963
Effects of divergent selection for serum insulin-like growth factor-I concentration on performance, feed efficiency, and ultrasound measures of carcass composition traits in Angus bulls and heifers, 2862
Effects of dry cow treatment of beef cows on pathogenic organisms, milk somatic cell counts, and calf growth during the subsequent lactation, 748
Effects of increasing dose of live cultures of *Lactobacillus acidophilus* (Strain NP 51) combined with a single dose of *Propionibacterium freudenreichii* (Strain NP 24) on performance and carcass characteristics of finishing beef steers, 756
Effects of long- or short-term exposure to a calf identified as persistently infected with bovine viral diarrhea virus on feedlot performance of freshly weaned, transport-stressed beef heifers, 1917
Effects of supplemental fat on growth performance and quality of beef from steers fed corn finishing diets, 936
Effects of the myostatin F94L substitution on beef traits, 1038
Evaluation of human chorionic gonadotropin as a replacement for gonadotropin-releasing hormone in ovulation-synchronization protocols before fixed timed artificial insemination in beef cattle, 2539
Evaluation of methods for computing approximate accuracies of predicted breeding values in maternal random regression models for growth traits in beef cattle, 1057
Familial and herd-level associations with paratuberculosis enzyme-linked immunosorbent assay status in beef cattle, 1977
Forage systems for cow-calf production in the Appalachian region, 2032
Genetic change results from selection on an economic breeding objective in beef cattle, 3348
Genetic evaluation of growth in a multibreed beef cattle population using random regression-linear spline models, 267
Inbreeding effects on postweaning production traits, conformation, and calving performance in Irish beef cattle, 3338
Influence of level of supplemental whole flaxseed on forage intake and site and extent of digestion in beef heifers consuming native grass hay, 2310
Models for genetic evaluation of Nelore cattle mature body weight, 2840
National cattle evaluation system for combined analysis of carcass characteristics and indicator traits recorded by using ultrasound in Angus cattle, 2518
Pancreatic mass, cellularity, and α-amylase and trypsin activity in feedlot steers fed diets differing in crude protein concentration, 909
The effects of feeding flaxseed during the receiving period on morbidity, mortality, performance, and carcass characteristics of heifers, 3054
The effects of ractopamine-hydrogen chloride (Optaflexx) on performance, carcass characteristics, and meat quality of finishing feedlot heifers, 902
The relationship of feeding behavior to residual feed intake in crossbred Angus steers fed traditional and no-roughage diets, 180
The value of DNA paternity identification in beef cattle: Examples from Nevada free-range ranches, 17
Transportation of young beef bulls alters circulating physiological parameters that may be effective biomarkers of stress, 1325

beef cow
Effect of ovulatory follicle size and expression of estrus on progesterone secretion in beef cows, 553
Effects of body condition score at parturition and postpartum protein supplementation on estrous behavior and size of the dominant follicle in beef cows, 2549
Endocrine factors and ovarian follicles are influenced by body condition and somatotropin in postpartum beef cows, 1335
Milk yield of primiparous beef cows from three calving systems and varied weaning ages, 768
The effect of residual feed intake classification on forage intake by grazing beef cows, 2670
Timing of artificial insemination in postpartum beef cows following administration of the CO-Synch + controlled internal drug-release protocol, 1519
Whole soybean supplementation and cow age class: Effects on intake, digestion, performance, and reproduction of beef cows, 1868

beef female
Effects of supplementation frequency on performance, reproductive, and metabolic responses of Brahman-crossbred females, 2296

beef heifer
Comparison of protocols to synchronize estrus and ovulation in estrous-cycling and prepubertal beef heifers, 1808

beef industry
ASAS Centennial Paper: Development of a corn-based beef industry, 3635

beef production system
Comparison of alternative beef production systems based on forage finishing or grain-forage diets with or without growth promotants: 2. Meat quality, fatty acid composition, and overall palatability, 1678
beef quality
Comparison of alternative beef production systems based on forage finishing or grain-forage diets with or without growth promotants: 2. Meat quality, fatty acid composition, and overall palatability, 1678
National Beef Quality Audit–2005: Survey of targeted cattle and carcass characteristics related to quality, quantity, and value of fed steers and heifers, 3533
beef steer
The interaction of harvesting time of day of switchgrass hay and ruminal degradability of supplemental protein offered to beef steers, 159
behavior
Effect of drinker type on water intake and waste in newly weaned piglets, 1439
Effect of the number of concentrate feeding places per pen on performance, behavior, and welfare indicators of Friesian calves during the first month after arrival at the feedlot, 419
Effects of housing finishing pigs in two group sizes and at two floor space allocations on production, health, behavior, and physiological variables, 982
Effects of shaded versus unshaded wallows on behavior, performance, and physiology of the outdoor lactating sow, 3628
Effects of weaning lambs in two stages or by abrupt separation on their behavior and growth rate, 220
Performance, behavior, and welfare of Friesian heifers housed in pens with two, four, and eight individuals per concentrate feeding place, 1446
The effects of R-salbutamol on behavior and physiology of finishing pigs, 3110
The motivation of cows to walk as thwarted by tethering, 2723
behavior test
Genetic analysis of results of a Swedish behavior test on German Shepherd Dogs and Labrador Retrievers, 2853
belly nosing
Effect of drinker type on water intake and waste in newly weaned piglets, 1439
benefit-cost analysis
The value of DNA paternity identification in beef cattle: Examples from Nevada's free-range ranches, 17
Bermudagrass
Effect of method of applying fibrolytic enzymes or ammonia to Bermudagrass hay on feed intake, digestion, and growth of beef steers, 882
betaine
Synergistic effects of betaine and conjugated linoleic acid on the growth and carcass composition of growing Iberian pigs, 102
bias
Assessing genetic gain, inbreeding, and bias attributable to different flock genetic means in alternative sheep sire referencing schemes, 526
Changes in connectedness over time in alternative sheep sire referencing schemes, 536
Estimation of accuracy and bias in genetic evaluations with genetic groups using sampling, 1047
binary trait
Genetic parameters for early lamb survival and growth in Scottish Blackface sheep, 1758
bioavailability
Bioavailability of copper from copper glycinate in steers fed high dietary sulfur and molybdenum, 173
Effect of chromium source on tissue concentration of chromium in pigs, 2971
biochemistry
Tolerance of ruminant animals to high dose in-feed administration of a selenium-enriched yeast, 197
bioclimatic index
A new heat load index for feedlot cattle, 226
bioefficacy
Cyst(e)ine imbalance and its effect on methionine precursor utilization in chicks, 1832
biofuel
Digestible and metabolizable energy of crude glycerol for growing pigs, 602
Growth performance, carcass characteristics, meat quality, and tissue histology of growing pigs fed crude glycerin-supplemented diets, 2962
biohydrogenation
BOARD-INVITED REVIEW: Recent advances in biohydrogenation of unsaturated fatty acids within the rumen microbial ecosystem, 397
Effects of saponins, quercetin, eugenol, and cinnamaldehyde on fatty acid biohydrogenation of forage polyunsaturated fatty acids in dual-flow continuous culture fermenters, 3045
biological marker
Citrulline and intestinal fatty acid-binding protein: Longitudinal markers of postweaning small intestinal function in pigs?, 3440
biological type
Effects of ractopamine supplementation and postmortem aging on longissimus muscle palatability of beef steers differing in biological type, 205
biomarker
Transportation of young beef bulls alters circulating physiological parameters that may be effective biomarkers of stress, 1325
biomedical model
A commentary on domestic animals as dual-purpose models that benefit agricultural and biomedical research, 2797
Bio-Mos
Use of mannan-oligosaccharides and zinc chelate as growth promoters and diarrhea preventative in weaning pigs: Effects on microbiota and gut function, 94
Bioplex Zn
Use of mannan-oligosaccharides and zinc chelate as growth promoters and diarrhea preventative in weaning pigs: Effects on microbiota and gut function, 94
birth weight
Effect of litter size and birth weight on growth, carcass and pork quality, and their relationship to postmortem proteolysis, 2357
Experimental selection for calving ease and postnatal growth in seven cattle populations. I. Changes in estimated breeding values, 2093
blastocyst elongation
Conceptus development during blastocyst elongation in lines of pigs selected for increased uterine capacity or ovulation rate, 2126
blind
Effect of neck injection and handler visibility on behavioral reactivity of beef steers, 1215
Effect of neck injection and handler visibility on behavioral reactivity of beef steers, 1215
bloat
ASAS Centennial Paper: Contributions in the *Journal of Animal Science* to understanding cattle metabolic and digestive disorders, 1711
body
Changes in glutamine metabolism indicate a mild catabolic state in the transition mare, 3424
Dynamics of body protein deposition and changes in body composition after sudden changes in amino acid intake: II. Entire male pigs, 2168
Energy requirements of Texel crossbred lambs, 3480
body composition
Dynamics of body protein deposition and changes in body composition after sudden changes in amino acid intake: I. Barrows, 2156
body condition
Effect of body condition on consumption of pine needles (*Pinus ponderosa*) by beef cows, 3608
Effects of body condition score at parturition and postpartum protein supplementation on estrous behavior and size of the dominant follicle in beef cows, 2549
Endocrine factors and ovarian follicles are influenced by body condition and somatotropin in postpartum beef cows, 1335
Individual variability in physiological adaptation to metabolic stress during early lactation in dairy cows kept under equal conditions, 2903
The effect of body condition on serum concentrations of two teratogenic alkaloids (anagyrine and ammodendrine) from lupines (*Lupinus* species) that cause crooked calf disease, 2771
body fat
In vivo estimation of goat carcass composition and body fat partition by real-time ultrasonography, 2369
body weight
Technical Note: Do dietary net energy values calculated from performance data offer increased sensitivity for detecting treatment differences?, 2756

bone
Response to dietary phosphorus deficiency is affected by genetic background in growing pigs, 2585
bone density
Exercising stall-housed gestating gilts: Effects on lameness, the musculo-skeletal system, production, and behavior, 3166
Bos indicus
A meta-analysis of energy and protein requirements for maintenance and growth of Nellore cattle, 1588
bovine
Bovine quantitative trait loci analysis for growth, carcass, and meat quality traits in an F_2 population from a cross between Japanese Black and Limousin, 2821
Copper deficiency in the young bovine results in dramatic decreases in brain copper concentration but does not alter brain prion protein biology, 3069
Differentiation of bovine intramuscular and subcutaneous stromal-vascular cells exposed to dexamethasone and troglitazone, 2531
Effects of implants of trenbolone acetate, estradiol, or both, on muscle insulin-like growth factor-I, insulin-like growth factor-I receptor, estrogen receptor-α, and androgen receptor messenger ribonucleic acid levels in feedlot steers, 3418
Identification and expression pattern of cationic amino acid transporter-1 mRNA in small intestinal epithelia of Angus steers at four production stages, 620
Optimization of in vitro conditions for bovine subcutaneous and intramuscular preadipocyte differentiation, 73
Promoter region of the bovine growth hormone receptor gene: Single nucleotide polymorphism discovery in cattle and association with performance in Brangus bulls, 3315
Translational efficiency of bovine pyruvate carboxylase 5′ untranslated region messenger ribonucleic acid variants, 3401
bovine milk
Cobalt supplied per os reduces the mammary Δ^9-desaturase index of bovine milk, 3062
bovine respiratory disease
Effects of commingling beef calves from different sources and weaning protocols during a forty-two-day receiving period on performance and bovine respiratory disease, 3146
bovine viral diarrhea virus
Effects of long- or short-term exposure to a calf identified as persistently infected with bovine viral diarrhea virus on feedlot performance of freshly weaned, transport-stressed beef heifers, 1917
Brahman
Effect of two dietary concentrate levels on tenderness, calpain and calpastatin activities, and carcass merit in Waguli and Brahman steers, 1426
brand
National Meat Case Study 2004: Product labeling information, branding, and packaging trends, 3593
Brangus
Promoter region of the bovine growth hormone receptor gene: Single nucleotide polymorphism discovery in cattle and association with performance in Brangus bulls, 3315
breed
Changes in food intake and circulating leptin due to gastrointestinal parasitism in lambs of two breeds, 1891
Genotype by environment interaction for lamb weaning weight in two Norwegian sheep breeds, 33
Meta-analysis of the effect of animal maturity on muscle characteristics in different muscles, breeds, and sexes of cattle, 2872
breed difference
Genetic analysis of results of a Swedish behavior test on German Shepherd Dogs and Labrador Retrievers, 2853
breeding objective
Genetic change results from selection on an economic breeding objective in beef cattle, 3348
breeding value estimation
Genomic selection using different marker types and densities, 2447
breeding values
Technical note: Prediction of breeding values using marker-derived relationship matrices, 2089
browse
A fecal near-infrared reflectance spectroscopy-aided methodology to determine goat dietary composition in a Mediterranean shrubland, 1345
buffalo
Genetic relationship and diversity analysis of Indian water buffalo (*Bubalus bubalis*), 1495
bull
Effect of rumen-degradable protein balance deficit on voluntary intake, microbial protein synthesis, and nitrogen metabolism in growing double-muscled Belgian Blue bulls fed corn silage-based diet, 680
bull behavior
Behavioral aspects of electronic bull separation and mate allocation in multiple-sire mating paddocks, 1690
butyrate
Effect of sodium butyrate on growth performance and response to lipopolysaccharide in weanling pigs, 442
by-product
BOARD-INVITED REVIEW: Use of distillers by-products in the beef cattle feeding industry, 1223
Effects of xylanase supplementation on the apparent digestibility and digestible content of energy, amino acids, phosphorus, and calcium in wheat and wheat by-products from dry milling fed to grower pigs, 3450

C

cage performance
Estimation of variance components and prediction of breeding values using pooled data, 2845
calcium
Effect of low doses of *Aspergillus niger* phytase on growth performance, bone strength, and nutrient absorption and excretion by growing and finishing swine fed corn-soybean meal diets deficient in available phosphorus and calcium, 858
Influence of dietary phosphorus concentration on the digestibility of phosphorus in monocalcium phosphate by growing pigs, 1861
Learned appetites for calcium, phosphorus, and sodium in sheep, 738
Use of 25-hydroxyvitamin D_3 and dietary calcium to improve tenderness of beef from the round of beef cows, 1637
calf
Changes of activity and mRNA expression of urea cycle enzymes in the liver of developing Holstein calves, 1526
Effect of supplemental energy source and frequency on growing calf performance, 3504
Effect of the number of concentrate feeding places per pen on performance, behavior, and welfare indicators of Friesian calves during the first month after arrival at the feedlot, 419
Effects of commingling beef calves from different sources and weaning protocols during a forty-two-day receiving period on performance and bovine respiratory disease, 3146
calpain
Effect of two dietary concentrate levels on tenderness, calpain and calpastatin activities, and carcass merit in Waguli and Brahman steers, 1426
calpastatin
Effect of two dietary concentrate levels on tenderness, calpain and calpastatin activities, and carcass merit in Waguli and Brahman steers, 1426
calving date
Milk yield of primiparous beef cows from three calving systems and varied weaning ages, 768
calving difficulty
Experimental selection for calving ease and postnatal growth in seven cattle populations. I. Changes in estimated breeding values, 2093
Experimental selection for calving ease and postnatal growth in seven cattle populations. II. Phenotypic differences, 2103
calving performance
Inbreeding effects on postweaning production traits, conformation, and calving performance in Irish beef cattle, 3338
candidate gene
Polymorphisms and haplotypes in the bovine neuropeptide Y, growth hormone receptor, ghrelin, insulin-like growth factor 2, and uncoupling proteins 2 and 3 genes and their associations with measures of growth, performance, feed efficiency, and carcass merit in beef cattle, 1
Single nucleotide polymorphisms in several porcine cathepsin genes are associated with growth, carcass, and production traits in Italian Large White pigs, 3300
candidate pathway
The fibroblast growth factor 2 gene is associated with embryonic mortality in cattle, 2063

Caracu
Evaluation of carcass characteristics of *Bos indicus* and tropically adapted *Bos taurus* breeds selected for postweaning weight, 1770
carbohydrase
Effect of diet containing phytate and phytase on the activity and messenger ribonucleic acid expression of carbohydrase and transporter in chickens, 3432
carbohydrate
Digestion of carbohydrates and utilization of energy in sows fed diets with contrasting levels and physicochemical properties of dietary fiber, 2208
Evaluation of a dynamic in vitro model to simulate the porcine ileal digestion of diets differing in carbohydrate composition, 1156
Influence of dietary fiber on luminal environment and morphology in the small and large intestine of sows, 2217
carcass
Corn oil or corn grain supplementation to steers grazing endophyte-free tall fescue. I. Effects on in vivo digestibility, performance, and carcass quality, 3215
Development and evaluation of empirical equations to interconvert between twelfth-rib fat and kidney, pelvic, and heart fat respective fat weights and to predict initial conditions of fat deposition models for beef cattle, 1984
Effects of dried distillers grains with solubles on growing and finishing pig performance in a commercial environment, 1579
Inbreeding effects on postweaning production traits, conformation, and calving performance in Irish beef cattle, 3338
National Beef Quality Audit–2005: Survey of targeted cattle and carcass characteristics related to quality, quantity, and value of fed steers and heifers, 3533
National cattle evaluation system for combined analysis of carcass characteristics and indicator traits recorded by using ultrasound in Angus cattle, 2518
Technical note: A novel technique to assess internal body fat of cattle by using real-time ultrasound, 763
carcass characteristic
Effect of two dietary concentrate levels on tenderness, calpain and calpastatin activities, and carcass merit in Waguli and Brahman steers, 1426
Effects of dietary sunflower seeds and tylosin phosphate on production variables, carcass characteristics, fatty acid composition, and liver abscess incidence in crossbred steers, 3125
carcass composition
Carcass composition and meat quality of equally mature kids and lambs, 1943
Effect of selection for growth rate on relative growth in rabbits, 3409
Effects of divergent selection for serum insulin-like growth factor-I concentration on performance, feed efficiency, and ultrasound measures of carcass composition traits in Angus bulls and heifers, 2862
In vivo estimation of goat carcass composition and body fat partition by real-time ultrasonography, 2369
Interactive effect of ractopamine and dietary fat source on pork quality characteristics of fresh pork chops during simulated retail display, 2711
Investigations of energy metabolism in weanling barrows: The interaction of dietary energy concentration and daily feed (energy) intake, 348
Quantitative trait locus mapping in an F_2 Duroc × Pietrain resource population: II. Carcass and meat quality traits, 254
Synergistic effects of betaine and conjugated linoleic acid on the growth and carcass composition of growing Iberian pigs, 102
carcass merit
Polymorphisms and haplotypes in the bovine neuropeptide Y, growth hormone receptor, ghrelin, insulin-like growth factor 2, and uncoupling proteins 2 and 3 genes and their associations with measures of growth, performance, feed efficiency, and carcass merit in beef cattle, 1
carcass quality
Effects of temperature stress on growth performance and bacon quality in grow-finish pigs housed at two densities, 1789
The correlation of chemical and physical corn kernel traits with growth performance and carcass characteristics in pigs, 592
The effects of sex and slaughter weight on growth performance and carcass traits of pigs intended for dry-cured ham from Teruel (Spain), 1933
carcass trait
Carcass, meat quality, and sensory characteristics of heavy body weight pigs fed ractopamine hydrochloride (Paylean), 3544
Effects of the myostatin F94L substitution on beef traits, 1038
Influence of sex and castration of females on growth performance and carcass and meat quality of heavy pigs destined for the dry-cured industry, 1410
carcass weight
Genetic components of heat stress in finishing pigs: Development of a heat load function, 2082
Genetic components of heat stress in finishing pigs: Parameter estimation, 2076
carcass yield
B-mode, real-time ultrasound for estimating carcass measures in live sheep: Accuracy of ultrasound measures and their relationships with carcass yield and value, 3203
caspase 3
Caspase 3 is not likely involved in the postmortem tenderization of beef muscle, 960
cathepsin
Single nucleotide polymorphisms in several porcine cathepsin genes are associated with growth, carcass, and production traits in Italian Large White pigs, 3300
cationic amino acid transporter-1
Identification and expression pattern of cationic amino acid transporter-1 mRNA in small intestinal epithelia of Angus steers at four production stages, 620
cattle
A putative quantitative trait locus on chromosome 20 associated with bovine pathogenic disease incidence, 2455
Animal performance and economic comparison of novel and toxic endophyte tall fescues to cool-season annuals, 2043
Animal trait ontology: The importance and usefulness of a unified trait vocabulary for animal species, 1485
ASAS Centennial Paper: Development of a corn-based beef industry, 3635
Bioavailability of copper from copper glycinate in steers fed high dietary sulfur and molybdenum, 173
Comparative genomic imprinting and expression analysis of six cattle genes, 25
Comparison of low-moisture blocks and salt for manipulating grazing patterns of beef cows, 1271
Effect of body condition on consumption of pine needles (*Pinus ponderosa*) by beef cows, 3608
Effect of fat supplementation and wheat pasture maturity on forage intake and digestion characteristics of steers grazing wheat pasture, 1263
Effect of frequency and amount of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3089
Effect of intake level and alfalfa substitution for grass hay on ruminal kinetics of fiber digestion and particle passage in beef cattle, 134
Effect of neck injection and handler visibility on behavioral reactivity of beef steers, 1215
Effect of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3079
Effects of duration of zilpaterol hydrochloride feeding and days on the finishing diet on feedlot cattle performance and carcass traits, 2005
Effects of feeding wet corn distillers grains with solubles with or without monensin and tylosin on the prevalence and antimicrobial susceptibilities of fecal foodborne pathogenic and commensal bacteria in feedlot cattle, 1182
Effects of selected combinations of tall fescue alkaloids on the vasoconstrictive capacity of fescue-naïve bovine lateral saphenous veins, 1021
Experimental selection for calving ease and postnatal growth in seven cattle populations. I. Changes in estimated breeding values, 2093
Experimental selection for calving ease and postnatal growth in seven cattle populations. II. Phenotypic differences, 2103
Indicators of genetic erosion in an endangered population: The Alentejana cattle breed in Portugal, 47
Inheritance of pulmonary arterial pressure in Angus cattle and its correlation with growth, 815
Light exposure during night suppresses nocturnal increase in growth hormone secretion in Holstein steers, 1799

Matching plant and animal processes to alter nutrient supply in strip-grazed cattle: Timing of herbage and fasting allocation, 1006
Meta-analysis of the effect of animal maturity on muscle characteristics in different muscles, breeds, and sexes of cattle, 2872
Model for estimating enteric methane emissions from United States dairy and feedlot cattle, 2738
Multi-trait and random regression approaches for addressing the wide range of weaning ages in Asturiana de los Valles beef cattle for genetic parameter estimation, 278
Nitrogen transactions along the gastrointestinal tract of cattle: A meta-analytical approach, 660
Polymorphisms and haplotypes in the bovine neuropeptide Y, growth hormone receptor, ghrelin, insulin-like growth factor 2, and uncoupling proteins 2 and 3 genes and their associations with measures of growth, performance, feed efficiency, and carcass merit in beef cattle, 1
Prolonged, moderate nutrient restriction in beef cattle results in persistently elevated circulating ghrelin concentration, 564
Reducing phosphorus inputs for grazing Holstein steers, 712
Technical Note: Do dietary net energy values calculated from performance data offer increased sensitivity for detecting treatment differences?, 2756
The effect of body condition on serum concentrations of two teratogenic alkaloids (anagyrine and ammodendrine) from lupines (*Lupinus* species) that cause crooked calf disease, 2771

cattle maturity
Predicting cattle age from eye lens weight and nitrogen content, dentition, and United States Department of Agriculture maturity score, 3557

cellular proliferation
Impacts of linseed meal and estradiol-17β on mass, cellularity, angiogenic factors, and vascularity of the jejunum, 3014

cellularity
Effects of selenium on organ mass and cellularity, 890

centennial
ASAS Centennial Paper: Utilization of pasture and forages by ruminants: A historical perspective, 3647

chaparral
The effect of polyethylene glycol on intake of Mediterranean shrubs by sheep and goats, 3491

chemical composition
Growth of protein, moisture, lipid, and ash of two genetic lines of barrows and gilts from twenty to one hundred twenty-five kilograms of body weight, 460
Prediction of the energy content of tallgrass prairie hay, 1372

chick
Cyst(e)ine imbalance and its effect on methionine precursor utilization in chicks, 1832

chicken
Adenosine monophosphate-activated protein kinase involved in variations of muscle glycogen and breast meat quality between lean and fat chickens, 2888
Animal trait ontology: The importance and usefulness of a unified trait vocabulary for animal species, 1485
Effect of diet containing phytate and phytase on the activity and messenger ribonucleic acid expression of carbohydrase and transporter in chickens, 3432
Marker-assisted assessment of genotype by environment interaction: A case study of single nucleotide polymorphism-mortality association in broilers in two hygiene environments, 3358

chito-oligosaccharide
Effects of chito-oligosaccharide supplementation on the growth performance, nutrient digestibility, intestinal morphology, and fecal shedding of *Escherichia coli* and *Lactobacillus* in weaning pigs, 2609

chondrocyte
Expression of matrix metalloproteinases during vascularization and ossification of normal and impaired avian growth plate, 1306

chromium
Effect of chromium source on tissue concentration of chromium in pigs, 2971

cinnamaldehyde
Effects of saponins, quercetin, eugenol, and cinnamaldehyde on fatty acid biohydrogenation of forage polyunsaturated fatty acids in dual-flow continuous culture fermenters, 3045

citation analysis
Research paper citation record keeping: It is not for wimps, 2795

citation tracker
Research paper citation record keeping: It is not for wimps, 2795

citrate
Effects of oral administration of sodium citrate or acetate to pigs on blood parameters, postmortem glycolysis, muscle pH decline, and quality attributes of pork, 1669

citrulline
Citrulline and intestinal fatty acid-binding protein: Longitudinal markers of postweaning small intestinal function in pigs?, 3440

classroom
Use of computer simulation to teach a systems approach to metabolism, 483

clearance
Dietary restriction reduces the rate of estradiol clearance in sheep (*Ovis aries*), 1124
Effect of ovulatory follicle size and expression of estrus on progesterone secretion in beef cows, 553

cloning
Porcine adipose triglyceride lipase complementary deoxyribonucleic acid clone, expression pattern, and regulation by resveratrol, 1781

coat color
Technical note: A novel method for routine genotyping of horse coat color gene polymorphisms, 1291

cobalt
Cobalt supplied per os reduces the mammary Δ^9-desaturase index of bovine milk, 3062

colon microflora
Effects of crude protein intake from grass silage-only diets on the equine colon ecosystem after an abrupt feed change, 3465

color
Chemical properties of cow and beef muscles: Benchmarking the differences and similarities, 1904
Interactive effect of ractopamine and dietary fat source on pork quality characteristics of fresh pork chops during simulated retail display, 2711
Physicochemical properties of meat of Italian Heavy Draft horses slaughtered at the age of eleven months, 1205
Recovering value from beef carcasses classified as dark cutters by United States Department of Agriculture graders, 1658
Tenderness, sensory, and color attributes of two muscles from the M. quadriceps femoris when fabricated using a modified hot-boning technique, 2690

colostrum
Effects of gestational plane of nutrition and selenium supplementation on mammary development and colostrum quality in pregnant ewe lambs, 2415

commensal bacteria
Lairage during transport of eighteen-kilogram pigs has an impact on innate immunity and commensal bacteria diversity in the intestines, 1232

commingling
Effects of commingling beef calves from different sources and weaning protocols during a forty-two-day receiving period on performance and bovine respiratory disease, 3146

comparative analysis
Comparative genomic imprinting and expression analysis of six cattle genes, 25

comparative animal model
A commentary on domestic animals as dual-purpose models that benefit agricultural and biomedical research, 2797

comparative slaughter
A meta-analysis of energy and protein requirements for maintenance and growth of Nellore cattle, 1588
Energy requirements of Texel crossbred lambs, 3480

compensatory growth
Dynamics of body protein deposition and changes in body composition after sudden changes in amino acid intake: I. Barrows, 2156
Dynamics of body protein deposition and changes in body composition after sudden changes in amino acid intake: II. Entire male pigs, 2168

competition
Estimation of genetic parameters for average daily gain using models with competition effects, 2525
Performance, behavior, and welfare of Friesian heifers housed in pens with two, four, and eight individuals per concentrate feeding place, 1446

composition
Chemical properties of cow and beef muscles: Benchmarking the differences and similarities, 1904
computer simulation model
Use of computer simulation to teach a systems approach to metabolism, 483
computer tomography
Association of the prion protein gene with individual tissue weights in Scottish Blackface sheep, 1737
conditioning
Behavioral aspects of electronic bull separation and mate allocation in multiple-sire mating paddocks, 1690
conjugated linoleic acid
BOARD-INVITED REVIEW: Recent advances in biohydrogenation of unsaturated fatty acids within the rumen microbial ecosystem, 397
Conjugated linoleic acid content in adipose tissue of calves suckling beef cows on pasture and supplemented with raw or extruded soybeans, 1624
Effect of feeding high-temperature, microtime-treated diets with different lipid sources on conjugated linoleic acid formation in finishing Hanwoo steers, 3033
Effects of conventional and grass-feeding systems on the nutrient composition of beef, 3575
Effects of dietary sunflower seeds and tylosin phosphate on production variables, carcass characteristics, fatty acid composition, and liver abscess incidence in crossbred steers, 3125
Effects of supplemental fat on growth performance and quality of beef from steers fed corn finishing diets, 936
Nonionophore antibiotics do not affect the *trans*-18:1 and conjugated linoleic acid composition in beef adipose tissue, 3522
Supplemental algal meal alters the ruminal *trans*-18:1 fatty acid and conjugated linoleic acid composition in cattle, 187
Synergistic effects of betaine and conjugated linoleic acid on the growth and carcass composition of growing Iberian pigs, 102
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the composition of pork from female pigs, 1145
connectedness
Changes in connectedness over time in alternative sheep sire referencing schemes, 536
constitution of line
Constitution and evaluation of a long-lived productive rabbit line, 515
consumer
Intramuscular fat content has little influence on the eating quality of fresh pork loin chops, 730
contact logger
Estimation of maternal variance components considering cow-calf contacts under extensive pastoral systems, 1081
contemporary food animal production
INVITED REVIEW: Animal science departments of the future, 3235
continuous culture
Effects of 2-hydroxy-4-(methylthio)-butanoic acid on performance and carcass characteristics of finishing beef cattle and on fermentation in continuous culture, 1951
control region
Interpopulation and intrapopulation maternal lineage genetics of the Lanyu pig (*Sus scrofa*) by analysis of mitochondrial cytochrome b and control region sequences, 2461
controlled internal drug-release insert
Comparison of protocols to synchronize estrus and ovulation in estrous-cycling and prepubertal beef heifers, 1808
Timing of artificial insemination in postpartum beef cows following administration of the CO-Synch + controlled internal drug-release protocol, 1519
conventionally fed
Effects of conventional and grass-feeding systems on the nutrient composition of beef, 3575
cooked color
Effects of packaging atmospheres on beef instrumental tenderness, fresh color stability, and internal cooked color, 1191
copper
Copper deficiency in the young bovine results in dramatic decreases in brain copper concentration but does not alter brain prion protein biology, 3069
The effect of dietary copper supplementation on fatty acid profile and oxidative stability of adipose depots in Boer × Spanish goats, 390
copper glycinate
Bioavailability of copper from copper glycinate in steers fed high dietary sulfur and molybdenum, 173
copper sulfate
Bioavailability of copper from copper glycinate in steers fed high dietary sulfur and molybdenum, 173
coproduct
Digestion of carbohydrates and utilization of energy in sows fed diets with contrasting levels and physicochemical properties of dietary fiber, 2208
Influence of dietary fiber on luminal environment and morphology in the small and large intestine of sows, 2217
corn
ASAS Centennial Paper: Development of a corn-based beef industry, 3635
Effects of supplement type and selenium source on measures of growth and selenium status in yearling beef steers, 1472
corn germ
Effects of feeding distillers dried grains with solubles, high-protein distillers dried grains, and corn germ to growing-finishing pigs on pig performance, carcass quality, and the palatability of pork, 1819
corn kernel trait
The correlation of chemical and physical corn kernel traits with growth performance and carcass characteristics in pigs, 592
Cornell Net Carbohydrate and Protein System for Sheep
Energy requirements of Texel crossbred lambs, 3480
correlation
Genetic associations of sow longevity with age at first farrowing, number of piglets weaned, and wean to insemination interval in the Finnish Landrace swine population, 3324
Reproductive performance and genetic parameters in first cross ewes from different maternal genotypes, 804
corticosteroid-binding globulin
Prenatal stress effects on pig development and response to weaning, 1316
cortisol
Prenatal stress effects on pig development and response to weaning, 1316
cow
Partitioning of energy in pregnant beef cows during nutritionally induced body weight fluctuation, 370
Use of 25-hydroxyvitamin D_3 and dietary calcium to improve tenderness of beef from the round of beef cows, 1637
cow muscle
Chemical properties of cow and beef muscles: Benchmarking the differences and similarities, 1904
cow-calf affiliation
Estimation of maternal variance components considering cow-calf contacts under extensive pastoral systems, 1081
cow-calf system
Forage systems for cow-calf production in the Appalachian region, 2032
Creole cattle
Genetic variability in Colombian Creole cattle populations estimated by pedigree information, 545
crude glycerin
Growth performance, carcass characteristics, meat quality, and tissue histology of growing pigs fed crude glycerin-supplemented diets, 2962
crude glycerol
Digestible and metabolizable energy of crude glycerol for growing pigs, 602
crude protein
Isoleucine and valine supplementation of a low-protein corn-wheat-soybean meal-based diet for piglets: Growth performance and nitrogen balance, 2936
cryptorchidism
Cryptorchidism and sex ratio are associated in dogs and pigs, 2480
cumulative production
Constitution and evaluation of a long-lived productive rabbit line, 515

curriculum
ASAS Centennial Paper: Animal science teaching: A century of excellence, 3640
cystatin
Single nucleotide polymorphisms in several porcine cathepsin genes are associated with growth, carcass, and production traits in Italian Large White pigs, 3300
cysteine
Cyst(e)ine imbalance and its effect on methionine precursor utilization in chicks, 1832
cytochrome b
Interpopulation and intrapopulation maternal lineage genetics of the Lanyu pig (*Sus scrofa*) by analysis of mitochondrial cytochrome b and control region sequences, 2461
Cytochrome c oxidase subunit III
Mitochondrial genome polymorphisms associated with longissimus muscle composition in Iberian pigs, 1283
cytokine
Effects of adding fibrous feedstuffs to the diet of young pigs on growth performance, intestinal cytokines, and circulating acute-phase proteins, 871

D

dairy
Chemical properties of cow and beef muscles: Benchmarking the differences and similarities, 1904
dairy calf
Behavior of dairy calves after a low dose of bacterial endotoxin, 2920
dairy cow
Effect of continuous milking and prostaglandin E_2 on milk production and mammary epithelial cell turnover, ultrastructure, and gene expression, 1132
Effects of supplementing fish oil in the drinking water of dairy cows on production performance and milk fatty acid composition, 720
Individual variability in physiological adaptation to metabolic stress during early lactation in dairy cows kept under equal conditions, 2903
Methane output and diet digestibility in response to feeding dairy cows crude linseed, extruded linseed, or linseed oil, 2642
The motivation of cows to walk as thwarted by tethering, 2723
Use of computer simulation to teach a systems approach to metabolism, 483
data quality
Estimation of accuracy and bias in genetic evaluations with genetic groups using sampling, 1047
dead
Frequency of the HAL-1843 mutation of the ryanodine receptor gene in dead and nonambulatory-noninjured pigs on arrival at the packing plant, 511
death
Mortality, death interval, survivals, and herd factors for death in gilts and sows in commercial breeding herds, 3159
Delphinium
The effect of 7,8-methylenedioxylycoctonine-type diterpenoid alkaloids on the toxicity of methyllycaconitine in mice, 2761
dense marker map
Genomic selection using different marker types and densities, 2447
dentition
Predicting cattle age from eye lens weight and nitrogen content, dentition, and United States Department of Agriculture maturity score, 3557
deoxyribonucleic acid
Development and evaluation of empirical equations to interconvert between twelfth-rib fat and kidney, pelvic, and heart fat respective fat weights and to predict initial conditions of fat deposition models for beef cattle, 1984
Promoter region of the bovine growth hormone receptor gene: Single nucleotide polymorphism discovery in cattle and association with performance in Brangus bulls, 3315
Δ^9-desaturase
Cobalt supplied per os reduces the mammary Δ^9-desaturase index of bovine milk, 3062
development
Changes of activity and mRNA expression of urea cycle enzymes in the liver of developing Holstein calves, 1526
diet
Changes in rumen microbial fermentation are due to a combined effect of type of diet and pH, 702
The effect of dietary copper supplementation on fatty acid profile and oxidative stability of adipose depots in Boer × Spanish goats, 390
diet composition
A fecal near-infrared reflectance spectroscopy-aided methodology to determine goat dietary composition in a Mediterranean shrubland, 1345
diet selection
Effects of *cis*-β-ocimene, *cis*-sabinene hydrate, and monoterpene and sesquiterpene mixtures on alfalfa pellet intake by lambs, 1478
The effect of polyethylene glycol on intake of Mediterranean shrubs by sheep and goats, 3491
dietary effect
Effect of live yeast culture supplementation on apparent digestibility and rate of passage in horses fed a high-fiber or high-starch diet, 339
dietary protein
Pancreatic mass, cellularity, and α-amylase and trypsin activity in feedlot steers fed diets differing in crude protein concentration, 909
dietary regulation
BOARD-INVITED REVIEW: Peptide absorption and utilization: Implications for animal nutrition and health, 2135
dietary sulfur
Comparative sulfur analysis using thermal combustion or inductively coupled plasma methodology and mineral composition of common livestock feedstuffs, 2377
differentiation
Ankyrin repeat and suppressor of cytokine signaling (SOCS) box-containing protein (ASB) 15 alters differentiation of mouse C_2C_{12} myoblasts and phosphorylation of mitogen-activated protein kinase and Akt, 2897
Differentiation of bovine intramuscular and subcutaneous stromal-vascular cells exposed to dexamethasone and troglitazone, 2531
Identification of genes downregulated during differentiation of porcine mesenteric adipocytes, 3367
Optimization of in vitro conditions for bovine subcutaneous and intramuscular preadipocyte differentiation, 73
digestibility
Digestion of carbohydrates and utilization of energy in sows fed diets with contrasting levels and physicochemical properties of dietary fiber, 2208
Effect of dietary soybean oil and soybean protein concentration on the concentration of digestible amino acids in soybean products fed to growing pigs, 1841
Effect of live yeast culture supplementation on apparent digestibility and rate of passage in horses fed a high-fiber or high-starch diet, 339
Effect of soluble and insoluble fiber on energy digestibility, nitrogen retention, and fiber digestibility of diets fed to gestating sows, 2568
Effects of coextrusion of flaxseed and field pea on the digestibility of energy, ether extract, fatty acids, protein, and amino acids in grower-finisher pigs, 2942
Effects of dietary supplementation of an enzyme blend on the ileal and fecal digestibility of nutrients in growing pigs, 1533
Effects of direct-fed microbial supplementation on digestibility and fermentation end-products in horses fed low- and high-starch concentrates, 2596
Effects of supplemental fat source on nutrient digestion and ruminal fermentation in steers, 640
Effects of xylanase supplementation on the apparent digestibility and digestible content of energy, amino acids, phosphorus, and calcium in wheat and wheat by-products from dry milling fed to grower pigs, 3450
Evaluation of a dynamic in vitro model to simulate the porcine ileal digestion of diets differing in carbohydrate composition, 1156
Factors affecting the variability in ileal amino acid digestibility in corn distillers dried grains with solubles fed to growing pigs, 2180
Influence of dietary fiber on luminal environment and morphology in the small and large intestine of sows, 2217
Influence of dietary phosphorus concentration on the digestibility of phosphorus in monocalcium phosphate by growing pigs, 1861
Prediction of in vivo apparent total tract energy digestibility of barley in grower pigs using an in vitro digestibility technique, 2619

digestible energy
Prediction of the energy content of tallgrass prairie hay, 1372
digestion
Effects of six carbohydrate sources on diet digestibility and postprandial glucose and insulin responses in cats, 2237
Influence of dry-rolling and tempering agent addition during the steam-flaking of sorghum grain on its feeding value for feedlot cattle, 916
Influence of level of supplemental whole flaxseed on forage intake and site and extent of digestion in beef heifers consuming native grass hay, 2310
Intake and digestion of wheat forage by stocker calves and lambs, 2424
Methane output and diet digestibility in response to feeding dairy cows crude linseed, extruded linseed, or linseed oil, 2642
digestion rate
Effect of intake level and alfalfa substitution for grass hay on ruminal kinetics of fiber digestion and particle passage in beef cattle, 134
direct-fed microbial
Effects of direct-fed microbial supplementation on digestibility and fermentation end-products in horses fed low- and high-starch concentrates, 2596
disease
A putative quantitative trait locus on chromosome 20 associated with bovine pathogenic disease incidence, 2455
Transportation of young beef bulls alters circulating physiological parameters that may be effective biomarkers of stress, 1325
disease resistance
Assessment of the dynamics of microparasite infections in genetically homogeneous and heterogeneous populations using a stochastic epidemic model, 1747
display color
Effects of different packaging atmospheres and injection-enhancement on beef tenderness, sensory attributes, desmin degradation, and display color, 2697
Effects of packaging atmospheres on beef instrumental tenderness, fresh color stability, and internal cooked color, 1191
distance moved
Effects of season and distance moved during loading on transport losses of market-weight pigs in two commercially available types of trailer, 3137
distillers dried grain with solubles
Effects of feeding distillers dried grains with solubles, high-protein distillers dried grains, and corn germ to growing-finishing pigs on pig performance, carcass quality, and the palatability of pork, 1819
Factors affecting the variability in ileal amino acid digestibility in corn distillers dried grains with solubles fed to growing pigs, 2180
Utilization of distillers dried grains with solubles and phytase in sow lactation diets to meet the phosphorus requirement of the sow and reduce fecal phosphorus concentration, 112
distillers grain
BOARD-INVITED REVIEW: Use of distillers by-products in the beef cattle feeding industry, 1223
Corn distillers grains with solubles derived from a traditional or partial fractionation process: Growth performance and carcass characteristics of finishing feedlot heifers, 2338
Effects of feeding wet corn distillers grains with solubles with or without monensin and tylosin on the prevalence and antimicrobial susceptibilities of fecal foodborne pathogenic and commensal bacteria in feedlot cattle, 1182
Efficacy of monensin and tylosin in finishing diets based on steam-flaked corn with and without corn wet distillers grains with solubles, 2270
Feeding distillers grains supplements to improve amino acid nutriture of lambs consuming moderate-quality forages, 691
Impact of beef cattle diets containing corn or sorghum distillers grains on beef color, fatty acid profiles, and sensory attributes, 923
distillers grains
Odorant production and persistence of *Escherichia coli* in manure slurries from cattle fed zero, twenty, forty, or sixty percent wet distillers grains with solubles, 3617
distillers solubles
Factors affecting the variability in ileal amino acid digestibility in corn distillers dried grains with solubles fed to growing pigs, 2180
distribution
Comparison of low-moisture blocks and salt for manipulating grazing patterns of beef cows, 1271
diterpenoid alkaloid
The effect of 7,8-methylenedioxylycoctonine-type diterpenoid alkaloids on the toxicity of methyllycaconitine in mice, 2761
divergent selection
Effects of divergent selection for serum insulin-like growth factor-I concentration on performance, feed efficiency, and ultrasound measures of carcass composition traits in Angus bulls and heifers, 2862
diversity
Genetic diversity in native and commercial breeds of pigs in Portugal assessed by microsatellites, 2496
diversity analysis
Genetic relationship and diversity analysis of Indian water buffalo (*Bubalus bubalis*), 1495
DNA marker
The value of DNA paternity identification in beef cattle: Examples from Nevada's free-range ranches, 17
docosahexaenoic acid
Circulating fatty acid profiles in response to three levels of dietary omega-3 fatty acid supplementation in horses, 1114
Docosahexaenoic acid regulates adipogenic genes in myoblasts via porcine peroxisome proliferator-activated receptor γ, 3385
Supplemental algal meal alters the ruminal *trans*-18:1 fatty acid and conjugated linoleic acid composition in cattle, 187
dog
ASAS Centennial Paper: Perspectives on domestication: The history of our relationship with man's best friend, 3245
Comparative in vitro fermentation activity in the canine distal gastrointestinal tract and fermentation kinetics of fiber sources, 2979
Cryptorchidism and sex ratio are associated in dogs and pigs, 2480
Genetic analysis of results of a Swedish behavior test on German Shepherd Dogs and Labrador Retrievers, 2853
domestic species
A commentary on domestic animals as dual-purpose models that benefit agricultural and biomedical research, 2797
domestication
ASAS Centennial Paper: Perspectives on domestication: The history of our relationship with man's best friend, 3245
dried distillers grains plus solubles
Effect of dried corn distillers grains plus solubles compared with soybean hulls, in late gestation heifer diets, on animal and reproductive performance, 1697
Effects of dried distillers grains with solubles on growing and finishing pig performance in a commercial environment, 1579
drinker device
Effect of drinker type on water intake and waste in newly weaned piglets, 1439
drinking
Effect of drinker type on water intake and waste in newly weaned piglets, 1439
drinking water
Effects of supplementing fish oil in the drinking water of dairy cows on production performance and milk fatty acid composition, 720
dry distillers grains
Effect of supplemental energy source and frequency on growing calf performance, 3504
dry period
Effect of continuous milking and prostaglandin E_2 on milk production and mammary epithelial cell turnover, ultrastructure, and gene expression, 1132
dry-cured ham
Survival analysis of preweaning piglet survival in a dry-cured ham-producing crossbred line, 2486
The effects of sex and slaughter weight on growth performance and carcass traits of pigs intended for dry-cured ham from Teruel (Spain), 1933
dry-rolled corn
Effects of grain processing and dietary lipid source on performance, carcass characteristics, plasma fatty acids, and sensory properties of steaks from finishing cattle, 167
dual-purpose animal model
A commentary on domestic animals as dual-purpose models that benefit agricultural and biomedical research, 2797
duodenal mucosal cell
Effects of ammonia load on glucose metabolism by isolated ovine duodenal mucosa, 2321

Duroc pig
Quantitative trait loci analysis on *Sus scrofa* chromosome 7 for meat production, meat quality, and carcass traits within a Duroc purebred population, 2833

E

early weaning
Effect of drinker type on water intake and waste in newly weaned piglets, 1439
education
ASAS Centennial Paper: Animal science teaching: A century of excellence, 3640
effective digestion rate
In vitro gas production profiles to estimate extent and effective first-order rate of neutral detergent fiber digestion in the rumen, 651
Prediction of in vivo neutral detergent fiber digestibility and digestion rate of potentially digestible neutral detergent fiber: Comparison of models, 2657
effective population size
Genetic variability in Hanoverian warmblood horses using pedigree analysis, 1503
efficiency
The relationship of feeding behavior to residual feed intake in crossbred Angus steers fed traditional and no-roughage diets, 180
effluent limitations
Meeting environmental requirements for the land application of manure, 3228
eicosapentaenoic acid
Circulating fatty acid profiles in response to three levels of dietary omega-3 fatty acid supplementation in horses, 1114
electric shock
Behavioral aspects of electronic bull separation and mate allocation in multiple-sire mating paddocks, 1690
electronic collar
Behavioral aspects of electronic bull separation and mate allocation in multiple-sire mating paddocks, 1690
embryo survival
Effect of soluble and insoluble dietary fiber on embryo survival and sow performance, 2576
embryo transfer
Technical note: Transfer of ovine embryos through a simplified minilaparotomy technique, 3224
endogenous
Nitrogen transactions along the gastrointestinal tract of cattle: A meta-analytical approach, 660
endotoxin
Behavior of dairy calves after a low dose of bacterial endotoxin, 2920
endotoxin challenge
Source of dietary lipid may modify the immune response in stressed feeder cattle, 1382
energetic efficiency
Energy requirements of Texel crossbred lambs, 3480
energetics
Performance by feedlot steers and heifers: Daily gain, mature body weight, dry matter intake, and dietary energetics, 2680
energy
Effect of soluble and insoluble fiber on energy digestibility, nitrogen retention, and fiber digestibility of diets fed to gestating sows, 2568
Effects of dietary energy source and level and injection of tilmicosin phosphate on immune function in lipopolysaccharide-challenged beef steers, 1963
Effects of xylanase supplementation on the apparent digestibility and digestible content of energy, amino acids, phosphorus, and calcium in wheat and wheat by-products from dry milling fed to grower pigs, 3450
Nutrient net absorption across the portal-drained viscera of forage-fed beef steers: Quantitative assessment and application to a nutritional prediction model, 2277
Partitioning of energy in pregnant beef cows during nutritionally induced body weight fluctuation, 370
Prediction of in vivo apparent total tract energy digestibility of barley in grower pigs using an in vitro digestibility technique, 2619
Technical Note: Effects of tethering on herbage selection, intake and digestibility, grazing behavior, and energy expenditure by Boer × Spanish goats grazing high-quality herbage, 1245
energy balance
Genetic parameters and predicted selection results for maternal traits related to lactation efficiency in sows, 1067
energy metabolism
Digestion of carbohydrates and utilization of energy in sows fed diets with contrasting levels and physicochemical properties of dietary fiber, 2208
energy supply
Individual variability in physiological adaptation to metabolic stress during early lactation in dairy cows kept under equal conditions, 2903
enhancement
Effects of dark storage and retail display on beef chuck and round muscles enhanced with ammonium hydroxide, salt, and carbon monoxide, 972
Enhancement of beef chuck and loin muscles with ammonium hydroxide and salt, 967
Enoploplastron triloricatum
Improved in vitro procedure for maintaining stock cultures of three genera of rumen protozoa, 1395
enterohepatic recirculation
Dietary restriction reduces the rate of estradiol clearance in sheep (*Ovis aries*), 1124
Entodinium caudatum
Improved in vitro procedure for maintaining stock cultures of three genera of rumen protozoa, 1395
Entodinium exiguum
Improved in vitro procedure for maintaining stock cultures of three genera of rumen protozoa, 1395
environment
Effects of late introduction of sows to two farrowing environments on the progress of farrowing and maternal behavior, 2730
enzymatic activity
Influence of direct-fed fibrolytic enzymes on diet digestibility and ruminal activity in sheep fed a grass hay-based diet, 1617
enzyme
Effects of dietary supplementation of an enzyme blend on the ileal and fecal digestibility of nutrients in growing pigs, 1533
epidemiology
Assessment of the dynamics of microparasite infections in genetically homogeneous and heterogeneous populations using a stochastic epidemic model, 1747
Epidinium caudatum
Improved in vitro procedure for maintaining stock cultures of three genera of rumen protozoa, 1395
epistasis
A quantitative trait locus genome scan for porcine muscle fiber traits reveals overdominance and epistasis, 3290
equine
Changes in glutamine metabolism indicate a mild catabolic state in the transition mare, 3424
Effects of crude protein intake from grass silage-only diets on the equine colon ecosystem after an abrupt feed change, 3465
ergovaline
Effects of selected combinations of tall fescue alkaloids on the vasoconstrictive capacity of fescue-naïve bovine lateral saphenous veins, 1021
erm
Technical note: Occurrence in fecal microbiota of genes conferring resistance to both macrolide-lincosamide-streptogramin B and tetracyclines concomitant with feeding of beef cattle with tylosin, 2385
Escherichia coli
Effects of chito-oligosaccharide supplementation on the growth performance, nutrient digestibility, intestinal morphology, and fecal shedding of *Escherichia coli* and *Lactobacillus* in weaning pigs, 2609
Evaluation of alternatives to antibiotics using an *Escherichia coli* K88$^+$ model of piglet diarrhea: Effects on gut microbial ecology, 836
Odorant production and persistence of *Escherichia coli* in manure slurries from cattle fed zero, twenty, forty, or sixty percent wet distillers grains with solubles, 3617
Escherichia coli O157
Effects of feeding wet corn distillers grains with solubles with or without monensin and tylosin on the prevalence and antimicrobial susceptibilities of fecal foodborne pathogenic and commensal bacteria in feedlot cattle, 1182
Influence of processed grains on fecal pH, starch concentration, and shedding of *Escherichia coli* O157 in feedlot, 632

essential fatty acid
Effects of grain processing and dietary lipid source on performance, carcass characteristics, plasma fatty acids, and sensory properties of steaks from finishing cattle, 167
estimated breeding value
Experimental selection for calving ease and postnatal growth in seven cattle populations. I. Changes in estimated breeding values, 2093
estradiol
Conceptus development during blastocyst elongation in lines of pigs selected for increased uterine capacity or ovulation rate, 2126
Dietary restriction reduces the rate of estradiol clearance in sheep (*Ovis aries*), 1124
Effect of ovulatory follicle size and expression of estrus on progesterone secretion in beef cows, 553
Effects of standing estrus and supplemental estradiol on changes in uterine pH during a fixed-time artificial insemination protocol, 2928
estradiol-17β
Estrogen and progesterone signaling: Genomic and nongenomic actions in domestic ruminants, 299
Effects of implants of trenbolone acetate, estradiol, or both, on muscle insulin-like growth factor-I, insulin-like growth factor-I receptor, estrogen receptor-α, and androgen receptor messenger ribonucleic acid levels in feedlot steers, 3418
estrogen
Impacts of linseed meal and estradiol-17β on mass, cellularity, angiogenic factors, and vascularity of the jejunum, 3014
estrous synchronization
Timing of artificial insemination in postpartum beef cows following administration of the CO-Synch + controlled internal drug-release protocol, 1519
estrus
Effects of body condition score at parturition and postpartum protein supplementation on estrous behavior and size of the dominant follicle in beef cows, 2549
Responses to delayed estrus after weaning in sows using oral progestagen treatment, 1996
estrus synchronization
Comparison of protocols to synchronize estrus and ovulation in estrous-cycling and prepubertal beef heifers, 1808
ethanol
BOARD-INVITED REVIEW: Use of distillers by-products in the beef cattle feeding industry, 1223
eugenol
Effects of saponins, quercetin, eugenol, and cinnamaldehyde on fatty acid biohydrogenation of forage polyunsaturated fatty acids in dual-flow continuous culture fermenters, 3045
ewe
Effects of selenium supply and dietary restriction on maternal and fetal metabolic hormones in pregnant ewe lambs, 1254
Genetic variation of plasma insulin-like growth factor-1 in young crossbred ewes and its relationship with their maintenance feed intake at maturity and production traits, 2068
Reproductive performance and genetic parameters in first cross ewes from different maternal genotypes, 804
ewe lamb
Effects of gestational plane of nutrition and selenium supplementation on mammary development and colostrum quality in pregnant ewe lambs, 2415
exercise
Exercising stall-housed gestating gilts: Effects on lameness, the musculo-skeletal system, production, and behavior, 3166
The motivation of cows to walk as thwarted by tethering, 2723
extruded soybean
Conjugated linoleic acid content in adipose tissue of calves suckling beef cows on pasture and supplemented with raw or extruded soybeans, 1624
extrusion
Effects of coextrusion of flaxseed and field pea on the digestibility of energy, ether extract, fatty acids, protein, and amino acids in grower-finisher pigs, 2942

F

F_2 family
Bovine quantitative trait loci analysis for growth, carcass, and meat quality traits in an F_2 population from a cross between Japanese Black and Limousin, 2821
F94L
Effects of the myostatin F94L substitution on beef traits, 1038
fall-calving
Allocating forage to fall-calving cow-calf pairs strip-grazing stockpiled tall fescue, 780
farm animal research
A commentary on domestic animals as dual-purpose models that benefit agricultural and biomedical research, 2797
farrowing pen
Effects of late introduction of sows to two farrowing environments on the progress of farrowing and maternal behavior, 2730
fasting and herbage allocation
Matching plant and animal processes to alter nutrient supply in strip-grazed cattle: Timing of herbage and fasting allocation, 1006
fat
Development and evaluation of empirical equations to interconvert between twelfth-rib fat and kidney, pelvic, and heart fat respective fat weights and to predict initial conditions of fat deposition models for beef cattle, 1984
Effect of dried corn distillers grains plus solubles compared with soybean hulls, in late gestation heifer diets, on animal and reproductive performance, 1697
fat supplementation
Effect of fat supplementation and wheat pasture maturity on forage intake and digestion characteristics of steers grazing wheat pasture, 1263
fatness
Adenosine monophosphate-activated protein kinase involved in variations of muscle glycogen and breast meat quality between lean and fat chickens, 2888
fatty acid
Chemical and sensory properties of beef of known source and finished on wet distillers grains diets containing varying types and levels of roughage, 949
Comparison of alternative beef production systems based on forage finishing or grain-forage diets with or without growth promotants: 2. Meat quality, fatty acid composition, and overall palatability, 1678
Effects of coextrusion of flaxseed and field pea on the digestibility of energy, ether extract, fatty acids, protein, and amino acids in grower-finisher pigs, 2942
Effects of conventional and grass-feeding systems on the nutrient composition of beef, 3575
Effects of supplemental fat on growth performance and quality of beef from steers fed corn finishing diets, 936
Effects of supplemental fat source on nutrient digestion and ruminal fermentation in steers, 640
Growth performance, carcass characteristics, meat quality, and tissue histology of growing pigs fed crude glycerin-supplemented diets, 2962
Influence of level of supplemental whole flaxseed on forage intake and site and extent of digestion in beef heifers consuming native grass hay, 2310
Methane output and diet digestibility in response to feeding dairy cows crude linseed, extruded linseed, or linseed oil, 2642
Physicochemical properties of meat of Italian Heavy Draft horses slaughtered at the age of eleven months, 1205
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the composition of pork from female pigs, 1145
fatty acid composition
Interactive effect of ractopamine and dietary fat source on pork quality characteristics of fresh pork chops during simulated retail display, 2711
fecal starch
Influence of processed grains on fecal pH, starch concentration, and shedding of *Escherichia coli* O157 in feedlot, 632
feces
A fecal near-infrared reflectance spectroscopy-aided methodology to determine goat dietary composition in a Mediterranean shrubland, 1345
feed additive
Effect of a *Bacillus*-based direct-fed microbial feed supplement on growth performance and pen cleaning characteristics of growing-finishing pigs, 1459
feed efficiency
Optimum duration of performance tests for evaluating growing pigs for growth and feed efficiency traits, 1096
Polymorphisms and haplotypes in the bovine neuropeptide Y, growth hormone receptor, ghrelin, insulin-like growth factor 2, and uncoupling proteins 2 and 3 genes and their associations with measures

of growth, performance, feed efficiency, and carcass merit in beef cattle, 1
Selection response and genetic parameters for residual feed intake in Yorkshire swine, 287
The effect of residual feed intake classification on forage intake by grazing beef cows, 2670
feed intake
Effects of 2-hydroxy-4-(methylthio)-butanoic acid on performance and carcass characteristics of finishing beef cattle and on fermentation in continuous culture, 1951
Effects of sweeteners on individual feed intake characteristics and performance in group-housed weanling pigs, 2990
Genetic variation of plasma insulin-like growth factor-1 in young crossbred ewes and its relationship with their maintenance feed intake at maturity and production traits, 2068
Optimum duration of performance tests for evaluating growing pigs for growth and feed efficiency traits, 1096
Technical Note: Do dietary net energy values calculated from performance data offer increased sensitivity for detecting treatment differences?, 2756
feed manufacturing
Effect of crude glycerol on pellet mill production and nursery pig growth performance, 2228
feeding behavior
The effect of heated mash on performance and feeding behavior of newly weaned piglets, 3600
The relationship of feeding behavior to residual feed intake in crossbred Angus steers fed traditional and no-roughage diets, 180
feeding place
Effect of the number of concentrate feeding places per pen on performance, behavior, and welfare indicators of Friesian calves during the first month after arrival at the feedlot, 419
feeding system
ASAS CENTENNIAL PAPER: Net energy systems for beef cattle—Concepts, application, and future models, 2779
feedlot
A new heat load index for feedlot cattle, 226
BOARD-INVITED REVIEW: Use of distillers by-products in the beef cattle feeding industry, 1223
Corn distillers grains with solubles derived from a traditional or partial fractionation process: Growth performance and carcass characteristics of finishing feedlot heifers, 2338
Effects of dietary nonprotein nitrogen on performance, digestibility, ruminal characteristics, and microbial efficiency in crossbred steers, 1173
Effects of duration of zilpaterol hydrochloride feeding and days on the finishing diet on feedlot cattle performance and carcass traits, 2005
Effects of increasing dose of live cultures of *Lactobacillus acidophilus* (Strain NP 51) combined with a single dose of *Propionibacterium freudenreichii* (Strain NP 24) on performance and carcass characteristics of finishing beef steers, 756
Effects of long- or short-term exposure to a calf identified as persistently infected with bovine viral diarrhea virus on feedlot performance of freshly weaned, transport-stressed beef heifers, 1917
Efficacy of monensin and tylosin in finishing diets based on steam-flaked corn with and without corn wet distillers grains with solubles, 2270
Performance by feedlot steers and heifers: Daily gain, mature body weight, dry matter intake, and dietary energetics, 2680
Technical Note: Do dietary net energy values calculated from performance data offer increased sensitivity for detecting treatment differences?, 2756
The effects of feeding flaxseed during the receiving period on morbidity, mortality, performance, and carcass characteristics of heifers, 3054
feedlot cattle
Influence of processed grains on fecal pH, starch concentration, and shedding of *Escherichia coli* O157 in feedlot, 632
Influence of slice baling on feeding value of alfalfa hay in receiving and finishing diets for feedlot cattle, 2749
Odorant production and persistence of *Escherichia coli* in manure slurries from cattle fed zero, twenty, forty, or sixty percent wet distillers grains with solubles, 3617
feedlot performance
Effects of 2-hydroxy-4-(methylthio)-butanoic acid on performance and carcass characteristics of finishing beef cattle and on fermentation in continuous culture, 1951
feedlot steer
Effects of calcium magnesium carbonate and roughage level on feedlot performance, ruminal metabolism, and site and extent of digestion in steers fed high-grain diets, 2998
feedstuff
Comparative sulfur analysis using thermal combustion or inductively coupled plasma methodology and mineral composition of common livestock feedstuffs, 2377
feline
Effects of six carbohydrate sources on diet digestibility and postprandial glucose and insulin responses in cats, 2237
fertility
Constitution and evaluation of a long-lived productive rabbit line, 515
Utilization of soybeans or corn milling by-products in beef heifer development diets, 476
fertilization rate
The fibroblast growth factor 2 gene is associated with embryonic mortality in cattle, 2063
fescue toxicosis
Effects of selected combinations of tall fescue alkaloids on the vasoconstrictive capacity of fescue-naïve bovine lateral saphenous veins, 1021
Festuca arundinacea Schreb.
Animal performance and economic comparison of novel and toxic endophyte tall fescues to cool-season annuals, 2043
fetal
Effects of selenium on organ mass and cellularity, 890
fetal growth
Baggs ewes adapt to maternal undernutrition and maintain conceptus growth by maintaining fetal plasma concentrations of amino acids, 820
fetal intrauterine growth restriction
Baggs ewes adapt to maternal undernutrition and maintain conceptus growth by maintaining fetal plasma concentrations of amino acids, 820
fetal programming
Baggs ewes adapt to maternal undernutrition and maintain conceptus growth by maintaining fetal plasma concentrations of amino acids, 820
fetus
AMP-activated protein kinase and adipogenesis in sheep fetal skeletal muscle and 3T3-L1 cells, 1296
Effects of selenium supply and dietary restriction on maternal and fetal metabolic hormones in pregnant ewe lambs, 1254
FGF2
The fibroblast growth factor 2 gene is associated with embryonic mortality in cattle, 2063
fiber
A regional evaluation of the effect of fiber type in gestation diets on sow reproductive performance, 1573
Comparative in vitro fermentation activity in the canine distal gastrointestinal tract and fermentation kinetics of fiber sources, 2979
Effect of common antinutritive factors and fibrous feedstuffs in pig diets on amino acid digestibilities with special emphasis on threonine, 609
Effect of soluble and insoluble dietary fiber on embryo survival and sow performance, 2576
Effect of soluble and insoluble fiber on energy digestibility, nitrogen retention, and fiber digestibility of diets fed to gestating sows, 2568
Effects of adding fibrous feedstuffs to the diet of young pigs on growth performance, intestinal cytokines, and circulating acute-phase proteins, 871
In vitro gas production profiles to estimate extent and effective first-order rate of neutral detergent fiber digestion in the rumen, 651
Prediction of in vivo neutral detergent fiber digestibility and digestion rate of potentially digestible neutral detergent fiber: Comparison of models, 2657
fiber digestion
Effect of live yeast culture supplementation on apparent digestibility and rate of passage in horses fed a high-fiber or high-starch diet, 339
fibrolytic enzyme
Effect of method of applying fibrolytic enzymes or ammonia to Bermudagrass hay on feed intake, digestion, and growth of beef steers, 882

Influence of direct-fed fibrolytic enzymes on diet digestibility and ruminal activity in sheep fed a grass hay-based diet, 1617
field pea
Effects of coextrusion of flaxseed and field pea on the digestibility of energy, ether extract, fatty acids, protein, and amino acids in grower-finisher pigs, 2942
finishing
Determining an optimum lysine:calorie ratio for barrows and gilts in a commercial finishing facility, 2190
finishing diet
Effects of supplemental fat source on nutrient digestion and ruminal fermentation in steers, 640
fish oil
Effects of supplementing fish oil in the drinking water of dairy cows on production performance and milk fatty acid composition, 720
Fatty acid profile and oxidative stability of pork as influenced by duration and time of dietary linseed or fish oil supplementation, 1418
fixed-time artificial insemination
Effects of standing estrus and supplemental estradiol on changes in uterine pH during a fixed-time artificial insemination protocol, 2928
flavonoid
Effects of saponins, quercetin, eugenol, and cinnamaldehyde on fatty acid biohydrogenation of forage polyunsaturated fatty acids in dual-flow continuous culture fermenters, 3045
flavor
Chemical and sensory properties of beef of known source and finished on wet distillers grains diets containing varying types and levels of roughage, 949
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the quality of pork from female pigs, 1402
flax
Effects of coextrusion of flaxseed and field pea on the digestibility of energy, ether extract, fatty acids, protein, and amino acids in grower-finisher pigs, 2942
flaxseed
Effects of grain processing and dietary lipid source on performance, carcass characteristics, plasma fatty acids, and sensory properties of steaks from finishing cattle, 167
Influence of level of supplemental whole flaxseed on forage intake and site and extent of digestion in beef heifers consuming native grass hay, 2310
The effects of feeding flaxseed during the receiving period on morbidity, mortality, performance, and carcass characteristics of heifers, 3054
flight speed
Effect of neck injection and handler visibility on behavioral reactivity of beef steers, 1215
floor condition
Net joint kinetics in the limbs of pigs walking on concrete floor in dry and contaminated conditions, 992
foal meat
Physicochemical properties of meat of Italian Heavy Draft horses slaughtered at the age of eleven months, 1205
follicle
Effects of body condition score at parturition and postpartum protein supplementation on estrous behavior and size of the dominant follicle in beef cows, 2549
Endocrine factors and ovarian follicles are influenced by body condition and somatotropin in postpartum beef cows, 1335
follicle size
Effect of ovulatory follicle size and expression of estrus on progesterone secretion in beef cows, 553
Gonadotropin-releasing hormone-induced ovulation and luteinizing hormone release in beef heifers: Effect of day of the cycle, 83
food intake
Central role of the melanocortin-4 receptors in appetite regulation after endotoxin, 2557
forage
ASAS Centennial Paper: Utilization of pasture and forages by ruminants: A historical perspective, 3647
Effect of method of applying fibrolytic enzymes or ammonia to Bermudagrass hay on feed intake, digestion, and growth of beef steers, 882
Forage systems for cow-calf production in the Appalachian region, 2032
Influence of level of supplemental whole flaxseed on forage intake and site and extent of digestion in beef heifers consuming native grass hay, 2310
Prediction of the energy content of tallgrass prairie hay, 1372
forage allocation
Allocating forage to fall-calving cow-calf pairs strip-grazing stockpiled tall fescue, 780
forage intake
Effect of supplemental energy source and frequency on growing calf performance, 3504
The effect of residual feed intake classification on forage intake by grazing beef cows, 2670
forage-animal interface
ASAS Centennial Paper: Utilization of pasture and forages by ruminants: A historical perspective, 3647
frequency
Effect of frequency and amount of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3089
fructooligosaccharide
Effects of dietary short-chain fructooligosaccharides on the intestinal microflora of horses subjected to a sudden change in diet, 316
funding
INVITED REVIEW: Animal science departments of the future, 3235
Fusobacterium necrophorum
Effects of feeding polyclonal antibody preparations on rumen fermentation patterns, performance, and carcass characteristics of feedlot steers, 3023
future
ASAS CENTENNIAL PAPER: Impacts of animal science research on United States sheep production and predictions for the future, 3252

G

gain:feed
Technical Note: Do dietary net energy values calculated from performance data offer increased sensitivity for detecting treatment differences?, 2756
gait analysis
Net joint kinetics in the limbs of pigs walking on concrete floor in dry and contaminated conditions, 992
gas production
In vitro gas production profiles to estimate extent and effective first-order rate of neutral detergent fiber digestion in the rumen, 651
Prediction of in vivo neutral detergent fiber digestibility and digestion rate of potentially digestible neutral detergent fiber: Comparison of models, 2657
gastrointestinal nematode
The effects of feeding sericea lespedeza hay on growth rate of goats naturally infected with gastrointestinal nematodes, 2328
GDF8
Effects of the myostatin F94L substitution on beef traits, 1038
gene expression
Comparative genomic imprinting and expression analysis of six cattle genes, 25
Conceptus development during blastocyst elongation in lines of pigs selected for increased uterine capacity or ovulation rate, 2126
Differential expression in lung and bronchial lymph node of pigs with high and low responses to infection with porcine reproductive and respiratory syndrome virus, 3279
Effects of supplementation frequency on performance, reproductive, and metabolic responses of Brahman-crossbred females, 2296
Identification of genes downregulated during differentiation of porcine mesenteric adipocytes, 3367
Porcine adipose triglyceride lipase complementary deoxyribonucleic acid cione, expression pattern, and regulation by resveratrol, 1781
genetic
Reproductive performance and genetic parameters in first cross ewes from different maternal genotypes, 804
genetic association
Marker-assisted assessment of genotype by environment interaction: A case study of single nucleotide polymorphism-mortality association in broilers in two hygiene environments, 3358

genetic change
Genetic change results from selection on an economic breeding objective in beef cattle, 3348
genetic correlation
Models for genetic evaluation of Nelore cattle mature body weight, 2840
genetic diversity
Genetic variability in Hanoverian warmblood horses using pedigree analysis, 1503
Indicators of genetic erosion in an endangered population: The Alentejana cattle breed in Portugal, 47
Interpopulation and intrapopulation maternal lineage genetics of the Lanyu pig (*Sus scrofa*) by analysis of mitochondrial cytochrome b and control region sequences, 2461
genetic epidemiology
Familial and herd-level associations with paratuberculosis enzyme-linked immunosorbent assay status in beef cattle, 1977
genetic evaluation
Assessing genetic gain, inbreeding, and bias attributable to different flock genetic means in alternative sheep sire referencing schemes, 526
Changes in connectedness over time in alternative sheep sire referencing schemes, 536
Estimation of variance components and prediction of breeding values using pooled data, 2845
Technical note: Computing options for genetic evaluation with a large number of genetic markers, 1514
genetic groups
Estimation of accuracy and bias in genetic evaluations with genetic groups using sampling, 1047
genetic marker
Parentage identification using single nucleotide polymorphism genotypes: Application to product tracing, 2508
Technical note: Computing options for genetic evaluation with a large number of genetic markers, 1514
genetic parameter
Estimation of genetic parameters for average daily gain using models with competition effects, 2525
Genetic analysis of results of a Swedish behavior test on German Shepherd Dogs and Labrador Retrievers, 2853
Genetic components of heat stress in finishing pigs: Parameter estimation, 2076
Genetic parameters and predicted selection results for maternal traits related to lactation efficiency in sows, 1067
Genetic parameters for early lamb survival and growth in Scottish Blackface sheep, 1758
Genetic parameters for image analysis traits on *M. longissimus thoracis* and *M. trapezius* of carcass cross section in Japanese Black steers, 40
Genetic variation of plasma insulin-like growth factor-1 in young crossbred ewes and its relationship with their maintenance feed intake at maturity and production traits, 2068
National cattle evaluation system for combined analysis of carcass characteristics and indicator traits recorded by using ultrasound in Angus cattle, 2518
genetic trend
Experimental selection for calving ease and postnatal growth in seven cattle populations. I. Changes in estimated breeding values, 2093
genetic variability
Genetic diversity in native and commercial breeds of pigs in Portugal assessed by microsatellites, 2496
genetics
Assessment of the dynamics of microparasite infections in genetically homogeneous and heterogeneous populations using a stochastic epidemic model, 1747
Genetic associations of sow longevity with age at first farrowing, number of piglets weaned, and wean to insemination interval in the Finnish Landrace swine population, 3324
genome-wide selection
Genomic selection using different marker types and densities, 2447
genotype
Growth of protein, moisture, lipid, and ash of two genetic lines of barrows and gilts from twenty to one hundred twenty-five kilograms of body weight, 460
genotype by environment interaction
Genotype by environment interaction for lamb weaning weight in two Norwegian sheep breeds, 33
Marker-assisted assessment of genotype by environment interaction: A case study of single nucleotide polymorphism-mortality association in broilers in two hygiene environments, 3358
genotype sampling
Different methods of selecting animals for genotyping to maximize the amount of genetic information known in the population, 2471
genotyping error
Parentage identification using single nucleotide polymorphism genotypes: Application to product tracing, 2508
gestation
A regional evaluation of the effect of fiber type in gestation diets on sow reproductive performance, 1573
Effects of supplemental safflower and vitamin E during late gestation on lamb growth, serum metabolites, and thermogenesis, 3194
gestation length
Experimental selection for calving ease and postnatal growth in seven cattle populations. II. Phenotypic differences, 2103
ghrelin
Prolonged, moderate nutrient restriction in beef cattle results in persistently elevated circulating ghrelin concentration, 564
gilt
An estimate of the methionine requirement and its variability in growing pigs using the indicator amino acid oxidation technique, 364
Effect of space allowance during rearing and selection criteria on performance of gilts over three parities in a commercial swine production system, 3181
gilt castration
Influence of sex and castration of females on growth performance and carcass and meat quality of heavy pigs destined for the dry-cured industry, 1410
Gir
Evaluation of carcass characteristics of *Bos indicus* and tropically adapted *Bos taurus* breeds selected for postweaning weight, 1770
glucocorticoid
Differentiation of bovine intramuscular and subcutaneous stromal-vascular cells exposed to dexamethasone and troglitazone, 2531
glucose
Effects of ammonia load on glucose metabolism by isolated ovine duodenal mucosa, 2321
glutamine
Changes in glutamine metabolism indicate a mild catabolic state in the transition mare, 3424
glutamine synthetase
Changes in glutamine metabolism indicate a mild catabolic state in the transition mare, 3424
glutathione peroxidase
Effects of supplement type and selenium source on measures of growth and selenium status in yearling beef steers, 1472
glycerol
Effect of crude glycerol on pellet mill production and nursery pig growth performance, 2228
glycerol-3-phosphate dehydrogenase
Differentiation of bovine intramuscular and subcutaneous stromal-vascular cells exposed to dexamethasone and troglitazone, 2531
Optimization of in vitro conditions for bovine subcutaneous and intramuscular preadipocyte differentiation, 73
glycogen
Adenosine monophosphate-activated protein kinase involved in variations of muscle glycogen and breast meat quality between lean and fat chickens, 2888
glycolysis
Effects of oral administration of sodium citrate or acetate to pigs on blood parameters, postmortem glycolysis, muscle pH decline, and quality attributes of pork, 1669
goat
A fecal near-infrared reflectance spectroscopy-aided methodology to determine goat dietary composition in a Mediterranean shrubland, 1345
Effects of yeast culture and fibrolytic enzyme supplementation on in vitro fermentation characteristics of low-quality cereal straws, 1164
In vivo estimation of goat carcass composition and body fat partition by real-time ultrasonography, 2369
Technical Note: Effects of tethering on herbage selection, intake and digestibility, grazing behavior, and energy expenditure by Boer × Spanish goats grazing high-quality herbage, 1245

The effect of dietary copper supplementation on fatty acid profile and oxidative stability of adipose depots in Boer × Spanish goats, 390
The effects of feeding sericea lespedeza hay on growth rate of goats naturally infected with gastrointestinal nematodes, 2328
gonadotropin releasing hormone
Evaluation of human chorionic gonadotropin as a replacement for gonadotropin-releasing hormone in ovulation-synchronization protocols before fixed timed artificial insemination in beef cattle, 2539
Gonadotropin-releasing hormone-induced ovulation and luteinizing hormone release in beef heifers: Effect of day of the cycle, 83
grain processing
Influence of processed grains on fecal pH, starch concentration, and shedding of *Escherichia coli* O157 in feedlot, 632
grass
Comparing relative feed value with degradation parameters of grass and legume forages, 2344
grass-fed
Effects of conventional and grass-feeding systems on the nutrient composition of beef, 3575
grazing
Reducing phosphorus inputs for grazing Holstein steers, 712
Technical Note: Effects of tethering on herbage selection, intake and digestibility, grazing behavior, and energy expenditure by Boer × Spanish goats grazing high-quality herbage, 1245
grazing behavior
Comparison of low-moisture blocks and salt for manipulating grazing patterns of beef cows, 1271
Matching plant and animal processes to alter nutrient supply in strip-grazed cattle: Timing of herbage and fasting allocation, 1006
greenhouse gas
Model for estimating enteric methane emissions from United States dairy and feedlot cattle, 2738
group
Estimation of variance components and prediction of breeding values using pooled data, 2845
group size
Effects of housing finishing pigs in two group sizes and at two floor space allocations on production, health, behavior, and physiological variables, 982
growing pig
Effects of dietary supplementation of an enzyme blend on the ileal and fecal digestibility of nutrients in growing pigs, 1533
Growth performance, carcass characteristics, meat quality, and tissue histology of growing pigs fed crude glycerin-supplemented diets, 2962
growing-finishing pig
Effect of low doses of *Aspergillus niger* phytase on growth performance, bone strength, and nutrient absorption and excretion by growing and finishing swine fed corn-soybean meal diets deficient in available phosphorus and calcium, 858
growth
A meta-analysis of energy and protein requirements for maintenance and growth of Nellore cattle, 1588
Association of the prion protein gene with individual tissue weights in Scottish Blackface sheep, 1737
Bioavailability of copper from copper glycinate in steers fed high dietary sulfur and molybdenum, 173
Commercial validation of the true ileal digestible lysine requirement for 11- to 27-kilogram pigs, 324
Effect of a *Bacillus*-based direct-fed microbial feed supplement on growth performance and pen cleaning characteristics of growing-finishing pigs, 1459
Effects of dried distillers grains with solubles on growing and finishing pig performance in a commercial environment, 1579
Effects of dry cow treatment of beef cows on pathogenic organisms, milk somatic cell counts, and calf growth during the subsequent lactation, 748
Evaluation of carcass characteristics of *Bos indicus* and tropically adapted *Bos taurus* breeds selected for postweaning weight, 1770
Evaluation of methods for computing approximate accuracies of predicted breeding values in maternal random regression models for growth traits in beef cattle, 1957
Evaluation of NutriDense low-phytate corn and added fat in growing and finishing swine diets, 1556
Experimental selection for calving ease and postnatal growth in seven cattle populations. II. Phenotypic differences, 2103
Genetic evaluation of growth in a multibreed beef cattle population using random regression-linear spline models, 267
Growth of protein, moisture, lipid, and ash of two genetic lines of barrows and gilts from twenty to one hundred twenty-five kilograms of body weight, 460
Inbreeding effects on postweaning production traits, conformation, and calving performance in Irish beef cattle, 3338
Inheritance of pulmonary arterial pressure in Angus cattle and its correlation with growth, 815
Investigations of energy metabolism in weanling barrows: The interaction of dietary energy concentration and daily feed (energy) intake, 348
Isoleucine and valine supplementation of a low-protein corn-wheat-soybean meal-based diet for piglets: Growth performance and nitrogen balance, 2936
Models for genetic evaluation of Nelore cattle mature body weight, 2840
Optimum duration of performance tests for evaluating growing pigs for growth and feed efficiency traits, 1096
Physiological and immunological responses to weaning and transport in the young pig: Modulation by administration of porcine somatotropin, 2913
Quantitative trait loci mapping in an F_2 Duroc × Pietrain resource population: 1. Growth traits, 241
Synergistic effects of betaine and conjugated linoleic acid on the growth and carcass composition of growing Iberian pigs, 102
The effect of vitamin A supplementation on postnatal adipose tissue development of lambs, 3393
The effects of feeding sericea lespedeza hay on growth rate of goats naturally infected with gastrointestinal nematodes, 2328
growth hormone
Light exposure during night suppresses nocturnal increase in growth hormone secretion in Holstein steers, 1799
growth hormone receptor
Promoter region of the bovine growth hormone receptor gene: Single nucleotide polymorphism discovery in cattle and association with performance in Brangus bulls, 3315
growth performance
Effect of sodium butyrate on growth performance and response to lipopolysaccharide in weanling pigs, 442
Effects of chito-oligosaccharide supplementation on the growth performance, nutrient digestibility, intestinal morphology, and fecal shedding of *Escherichia coli* and *Lactobacillus* in weaning pigs, 2609
Influence of sex and castration of females on growth performance and carcass and meat quality of heavy pigs destined for the dry-cured industry, 1410
Potato (*Solanum tuberosum* L. cv. Gogu valley) protein as a novel antimicrobial agent in weanling pigs, 1562
The correlation of chemical and physical corn kernel traits with growth performance and carcass characteristics in pigs, 592
The effects of sex and slaughter weight on growth performance and carcass traits of pigs intended for dry-cured ham from Teruel (Spain), 1933
Use of mannan-oligosaccharides and zinc chelate as growth promoters and diarrhea preventative in weaning pigs: Effects on microbiota and gut function, 94
growth rate
Effect of selection for growth rate on relative growth in rabbits, 3409
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the composition of pork from female pigs, 1145
Guzerah
Evaluation of carcass characteristics of *Bos indicus* and tropically adapted *Bos taurus* breeds selected for postweaning weight, 1770

H

Haemonchus contortus
Nitrogen and mineral balance of lambs artificially infected with *Haemonchus contortus* and fed tanniferous sainfoin (*Onobrychis viciifolia*), 1879

HAL-1843 mutation
Frequency of the HAL-1843 mutation of the ryanodine receptor gene in dead and nonambulatory-noninjured pigs on arrival at the packing plant, 511
Hanoverian
Genetic variability in Hanoverian warmblood horses using pedigree analysis, 1503
haplotype
Polymorphisms and haplotypes in the bovine neuropeptide Y, growth hormone receptor, ghrelin, insulin-like growth factor 2, and uncoupling proteins 2 and 3 genes and their associations with measures of growth, performance, feed efficiency, and carcass merit in beef cattle, 1
health
Effects of housing finishing pigs in two group sizes and at two floor space allocations on production, health, behavior, and physiological variables, 982
heat processing
The effects of feeding rice in substitution of corn and the degree of starch gelatinization of rice on the digestibility of dietary components and productive performance of young pigs, 119
heat production
Partitioning of energy in pregnant beef cows during nutritionally induced body weight fluctuation, 370
heat stress
A new heat load index for feedlot cattle, 226
Effects of shaded versus unshaded wallows on behavior, performance, and physiology of the outdoor lactating sow, 3628
Genetic components of heat stress in finishing pigs: Development of a heat load function, 2082
Genetic components of heat stress in finishing pigs: Parameter estimation, 2076
Sow line differences in heat stress tolerance expressed in reproductive performance traits, 3330
heifer
Corn distillers grains with solubles derived from a traditional or partial fractionation process: Growth performance and carcass characteristics of finishing feedlot heifers, 2338
Efficacy of monensin and tylosin in finishing diets based on steam-flaked corn with and without corn wet distillers grains with solubles, 2270
Performance by feedlot steers and heifers: Daily gain, mature body weight, dry matter intake, and dietary energetics, 2680
Performance, behavior, and welfare of Friesian heifers housed in pens with two, four, and eight individuals per concentrate feeding place, 1446
The effects of feeding flaxseed during the receiving period on morbidity, mortality, performance, and carcass characteristics of heifers, 3054
The effects of ractopamine-hydrogen chloride (Optaflexx) on performance, carcass characteristics, and meat quality of finishing feedlot heifers, 902
heifer development
Effect of prebreeding body weight or progestin exposure before breeding on beef heifer performance through the second breeding season, 451
Utilization of soybeans or corn milling by-products in beef heifer development diets, 476
herbivory
Effects of *cis*-β-ocimene, *cis*-sabinene hydrate, and monoterpene and sesquiterpene mixtures on alfalfa pellet intake by lambs, 1478
heritability
Estimates of genetic parameters for kyphosis in two crossbred swine populations, 1765
Genetic variation of plasma insulin-like growth factor-1 in young crossbred ewes and its relationship with their maintenance feed intake at maturity and production traits, 2068
Inheritance of pulmonary arterial pressure in Angus cattle and its correlation with growth, 815
Reproductive performance and genetic parameters in first cross ewes from different maternal genotypes, 804
Survival analysis of preweaning piglet survival in a dry-cured ham-producing crossbred line, 2486
high protein soybean
Effect of dietary soybean oil and soybean protein concentration on the concentration of digestible amino acids in soybean products fed to growing pigs, 1841
high-protein distillers dried grain
Effects of feeding distillers dried grains with solubles, high-protein distillers dried grains, and corn germ to growing-finishing pigs on pig performance, carcass quality, and the palatability of pork, 1819
high-temperature microtime treatment
Effect of feeding high-temperature, microtime-treated diets with different lipid sources on conjugated linoleic acid formation in finishing Hanwoo steers, 3033
Hirsch index
Research paper citation record keeping: It is not for wimps, 2795
histology
Growth performance, carcass characteristics, meat quality, and tissue histology of growing pigs fed crude glycerin-supplemented diets, 2962
histone acetylation
Trichostatin A and nuclear reprogramming of cloned rabbit embryos, 1106
historical
ASAS Centennial Paper: Utilization of pasture and forages by ruminants: A historical perspective, 3647
history
ASAS Centennial Paper: Perspectives on domestication: The history of our relationship with man's best friend, 3245
Holstein
Reducing phosphorus inputs for grazing Holstein steers, 712
homoarginine
The effect of microbial phytase on true and apparent ileal amino acid digestibilities in growing-finishing pigs, 1598
horse
Circulating fatty acid profiles in response to three levels of dietary omega-3 fatty acid supplementation in horses, 1114
Effect of live yeast culture supplementation on apparent digestibility and rate of passage in horses fed a high-fiber or high-starch diet, 339
Effects of dietary short-chain fructooligosaccharides on the intestinal microflora of horses subjected to a sudden change in diet, 316
Effects of direct-fed microbial supplementation on digestibility and fermentation end-products in horses fed low- and high-starch concentrates, 2596
Genetic variability in Hanoverian warmblood horses using pedigree analysis, 1503
Technical note: A novel method for routine genotyping of horse coat color gene polymorphisms, 1291
hot carcass weight
Technical Note: The USDA beef yield grade equation requires modification to reflect the current longissimus muscle area to hot carcass weight relationship, 1434
housing
The motivation of cows to walk as thwarted by tethering, 2723
housing density
Effects of temperature stress on growth performance and bacon quality in grow-finish pigs housed at two densities, 1789
human chorionic gonadotropin
Evaluation of human chorionic gonadotropin as a replacement for gonadotropin-releasing hormone in ovulation-synchronization protocols before fixed timed artificial insemination in beef cattle, 2539
husbandry
The effects of R-salbutamol on behavior and physiology of finishing pigs, 3110
hydroxy methionine
Cyst(e)ine imbalance and its effect on methionine precursor utilization in chicks, 1832
hypertrophy
Differential response of cull cow muscles to the hypertrophic actions of ractopamine-hydrogen chloride, 3568
hypothalamus
Central role of the melanocortin-4 receptors in appetite regulation after endotoxin, 2557

I

Iberian pig
Mitochondrial genome polymorphisms associated with longissimus muscle composition in Iberian pigs, 1283
Synergistic effects of betaine and conjugated linoleic acid on the growth and carcass composition of growing Iberian pigs, 102

identification system
Technical note: Evaluation of the official identification system for pigs for sale in New South Wales, 472
image analysis
Genetic parameters for image analysis traits on *M. longissimus thoracis* and *M. trapezius* of carcass cross section in Japanese Black steers, 40
Relationships between monounsaturated fatty acids of marbling flecks and image analysis traits in longissimus muscle for Japanese Black steers, 3551
immune
Physiological and immunological responses to weaning and transport in the young pig: Modulation by administration of porcine somatotropin, 2913
Prenatal stress effects on pig development and response to weaning, 1316
immune function
Effects of dietary energy source and level and injection of tilmicosin phosphate on immune function in lipopolysaccharide-challenged beef steers, 1963
immune modulation
Source of dietary lipid may modify the immune response in stressed feeder cattle, 1382
immunity
Effect of vitamin A restriction on carcass characteristics and immune status of beef steers, 1609
impact
ASAS CENTENNIAL PAPER: Impacts of animal science research on United States sheep production and predictions for the future, 3252
implant
Effect of feedlot management system on response to ractopamine-HCl in yearling steers, 2401
imprinting
Comparative genomic imprinting and expression analysis of six cattle genes, 25
in situ degradation
Comparing relative feed value with degradation parameters of grass and legume forages, 2344
in vitro
Effects of saponins, quercetin, eugenol, and cinnamaldehyde on fatty acid biohydrogenation of forage polyunsaturated fatty acids in dual-flow continuous culture fermenters, 3045
Evaluation of the fermentation dynamics of soluble crude protein from three protein sources in continuous culture fermenters, 1364
Prediction of in vivo apparent total tract energy digestibility of barley in grower pigs using an in vitro digestibility technique, 2619
in vitro culture
Improved in vitro procedure for maintaining stock cultures of three genera of rumen protozoa, 1395
in vitro digestibility
Effects of yeast culture and fibrolytic enzyme supplementation on in vitro fermentation characteristics of low-quality cereal straws, 1164
in vitro embryo production
Technical note: Transfer of ovine embryos through a simplified mini-laparotomy technique, 3224
in vitro fermentation kinetics
Comparative in vitro fermentation activity in the canine distal gastrointestinal tract and fermentation kinetics of fiber sources, 2979
in vitro gas production
Effects of yeast culture and fibrolytic enzyme supplementation on in vitro fermentation characteristics of low-quality cereal straws, 1164
in vitro model
Evaluation of a dynamic in vitro model to simulate the porcine ileal digestion of diets differing in carbohydrate composition, 1156
inbred line
Combined detection and introgression of quantitative trait loci underlying desirable traits, 1089
inbreeding
Genetic variability in Colombian Creole cattle populations estimated by pedigree information, 545
Genetic variability in Hanoverian warmblood horses using pedigree analysis, 1503
Indicators of genetic erosion in an endangered population: The Alentejana cattle breed in Portugal, 47
inbreeding depression
Inbreeding effects on postweaning production traits, conformation, and calving performance in Irish beef cattle, 3338
indicator amino acid oxidation
An estimate of the methionine requirement and its variability in growing pigs using the indicator amino acid oxidation technique, 364
inductively coupled plasma
Comparative sulfur analysis using thermal combustion or inductively coupled plasma methodology and mineral composition of common livestock feedstuffs, 2377
infection
Changes in food intake and circulating leptin due to gastrointestinal parasitism in lambs of two breeds, 1891
infection transmission
Assessment of the dynamics of microparasite infections in genetically homogeneous and heterogeneous populations using a stochastic epidemic model, 1747
inflammation
Dietary tryptophan helps to preserve tryptophan homeostasis in pigs suffering from lung inflammation, 3473
ingredient
Effects of six carbohydrate sources on diet digestibility and postprandial glucose and insulin responses in cats, 2237
injection
A regional evaluation of injections of high levels of vitamin A on reproductive performance of sows, 333
Effect of neck injection and handler visibility on behavioral reactivity of beef steers, 1215
injection-enhancement
Effects of different packaging atmospheres and injection-enhancement on beef tenderness, sensory attributes, desmin degradation, and display color, 2697
innate immunity
Lairage during transport of eighteen-kilogram pigs has an impact on innate immunity and commensal bacteria diversity in the intestines, 1232
insulin-like growth factor-I
Effect of feedlot management system on response to ractopamine-HCl in yearling steers, 2401
Effects of divergent selection for serum insulin-like growth factor-I concentration on performance, feed efficiency, and ultrasound measures of carcass composition traits in Angus bulls and heifers, 2862
Effects of implants of trenbolone acetate, estradiol, or both, on muscle insulin-like growth factor-I, insulin-like growth factor-I receptor, estrogen receptor-α, and androgen receptor messenger ribonucleic acid levels in feedlot steers, 3418
Endocrine factors and ovarian follicles are influenced by body condition and somatotropin in postpartum beef cows, 1335
Genetic variation of plasma insulin-like growth factor-1 in young crossbred ewes and its relationship with their maintenance feed intake at maturity and production traits, 2068
intake
Effect of body condition on consumption of pine needles (*Pinus ponderosa*) by beef cows, 3608
Effects of *cis*-β-ocimene, *cis*-sabinene hydrate, and monoterpene and sesquiterpene mixtures on alfalfa pellet intake by lambs, 1478
Influence of dietary phosphorus concentration on the digestibility of phosphorus in monocalcium phosphate by growing pigs, 1861
Intake and digestion of wheat forage by stocker calves and lambs, 2424
Nutrient net absorption across the portal-drained viscera of forage-fed beef steers: Quantitative assessment and application to a nutritional prediction model, 2277
Protein elongation rates in tissues of growing and adult sheep, 2288
internal fat
Technical note: A novel technique to assess internal body fat of cattle by using real-time ultrasound, 763
intestinal fatty acid-binding protein
Citrulline and intestinal fatty acid-binding protein: Longitudinal markers of postweaning small intestinal function in pigs?, 3440
intestinal morphology
Effects of chito-oligosaccharide supplementation on the growth performance, nutrient digestibility, intestinal morphology, and fecal shedding of *Escherichia coli* and *Lactobacillus* in weaning pigs, 2609

intestinal morphology
Potato (*Solanum tuberosum* L. cv. Gogu valley) protein as a novel antimicrobial agent in weanling pigs, 1562
intestine
BOARD-INVITED REVIEW: Peptide absorption and utilization: Implications for animal nutrition and health, 2135
intramuscular fat
Mitochondrial genome polymorphisms associated with longissimus muscle composition in Iberian pigs, 1283
Regional differences in porcine adipocytes isolated from skeletal muscle and adipose tissues as identified by a proteomic approach, 2115
intramuscular fat content
Sterol regulatory element binding transcription factor 1 expression and genetic polymorphism significantly affect intramuscular fat deposition in the longissimus muscle of Erhualian and Sutai pigs, 57
introgression
Combined detection and introgression of quantitative trait loci underlying desirable traits, 1089
inverse dynamics
Net joint kinetics in the limbs of pigs walking on concrete floor in dry and contaminated conditions, 992
iron
Effects of neonatal iron status, iron injections at birth, and weaning in young pigs from sows fed either organic or inorganic trace minerals, 2261
isoleucine
Isoleucine and valine supplementation of a low-protein corn-wheat-soybean meal-based diet for piglets: Growth performance and nitrogen balance, 2936

J

Japanese Black
Relationships between monounsaturated fatty acids of marbling flecks and image analysis traits in longissimus muscle for Japanese Black steers, 3551
Japanese Black steer
Genetic parameters for image analysis traits on *M. longissimus thoracis* and *M. trapezius* of carcass cross section in Japanese Black steers, 40
Johne's disease
Familial and herd-level associations with paratuberculosis enzyme-linked immunosorbent assay status in beef cattle, 1977
joint moment
Net joint kinetics in the limbs of pigs walking on concrete floor in dry and contaminated conditions, 992

K

ketosis
Individual variability in physiological adaptation to metabolic stress during early lactation in dairy cows kept under equal conditions, 2903
knuckle
Chemical and sensory properties of beef of known source and finished on wet distillers grains diets containing varying types and levels of roughage, 949
Tenderness, sensory, and color attributes of two muscles from the M. quadriceps femoris when fabricated using a modified hot-boning technique, 2690
kyphosis
Estimates of genetic parameters for kyphosis in two crossbred swine populations, 1765

L

labeling
National Meat Case Study 2004: Product labeling information, branding, and packaging trends, 3593
lactating sow
Genetic parameters and predicted selection results for maternal traits related to lactation efficiency in sows, 1067
lactation
Changes in glutamine metabolism indicate a mild catabolic state in the transition mare, 3424
Responses to delayed estrus after weaning in sows using oral progestagen treatment, 1996
Utilization of distillers dried grains with solubles and phytase in sow lactation diets to meet the phosphorus requirement of the sow and reduce fecal phosphorus concentration, 112
lactitol
Intestinal metabolism of weaned piglets fed a typical United States or European diet with or without supplementation of tributyrin and lactitol, 2952
Lactobacillus
Effects of chito-oligosaccharide supplementation on the growth performance, nutrient digestibility, intestinal morphology, and fecal shedding of *Escherichia coli* and *Lactobacillus* in weaning pigs, 2609
Lactobacillus acidophilus
Effects of direct-fed microbial supplementation on digestibility and fermentation end-products in horses fed low- and high-starch concentrates, 2596
Effects of increasing dose of live cultures of *Lactobacillus acidophilus* (Strain NP 51) combined with a single dose of *Propionibacterium freudenreichii* (Strain NP 24) on performance and carcass characteristics of finishing beef steers, 756
lactose
Assessment of lactose level in the mid- to late-nursery phase on performance of weanling pigs, 127
lairage
Lairage during transport of eighteen-kilogram pigs has an impact on innate immunity and commensal bacteria diversity in the intestines, 1232
lamb
Effects of weaning lambs in two stages or by abrupt separation on their behavior and growth rate, 220
Limiting amino acids for growing lambs fed a diet low in ruminally undegradable protein, 2627
The effect of vitamin A supplementation on postnatal adipose tissue development of lambs, 3393
lamb production
Reproductive performance and genetic parameters in first cross ewes from different maternal genotypes, 804
lamb survival
Effects of supplemental safflower and vitamin E during late gestation on lamb growth, serum metabolites, and thermogenesis, 3194
Genetic parameters for early lamb survival and growth in Scottish Blackface sheep, 1758
lameness
Exercising stall-housed gestating gilts: Effects on lameness, the musculo-skeletal system, production, and behavior, 3166
land application
Meeting environmental requirements for the land application of manure, 3228
land-grant college
INVITED REVIEW: Animal science departments of the future, 3235
Lanyu pig
Interpopulation and intrapopulation maternal lineage genetics of the Lanyu pig (*Sus scrofa*) by analysis of mitochondrial cytochrome b and control region sequences, 2461
laparoscopy
Technical note: Transfer of ovine embryos through a simplified mini-laparotomy technique, 3224
laparotomy
Technical note: Transfer of ovine embryos through a simplified mini-laparotomy technique, 3224
large intestine
Effects of dietary short-chain fructooligosaccharides on the intestinal microflora of horses subjected to a sudden change in diet, 316
The effect of dietary phosphorus and calcium level, phytase supplementation, and ileal infusion of pectin on the chemical composition and carbohydrase activity of fecal bacteria and the level of microbial metabolites in the gastrointestinal tract of pigs, 1544
larkspur
The effect of 7,8-methylenedioxylycoctonine-type diterpenoid alkaloids on the toxicity of methyllycaconitine in mice, 2761
late finishing pig
Carcass, meat quality, and sensory characteristics of heavy body weight pigs fed ractopamine hydrochloride (Paylean), 3544

laying hen
Estimation of variance components and prediction of breeding values using pooled data, 2845
learning
Learned appetites for calcium, phosphorus, and sodium in sheep, 738
leg conformation
Effect of leg conformation on survivability of Duroc, Landrace, and Large White sows, 2392
legume
Comparing relative feed value with degradation parameters of grass and legume forages, 2344
lemongrass powder
Manipulation of rumen ecology by dietary lemongrass (*Cymbopogon citratus* Stapf.) powder supplementation, 3497
length of productive life
Genetic associations of sow longevity with age at first farrowing, number of piglets weaned, and wean to insemination interval in the Finnish Landrace swine population, 3324
lens
Predicting cattle age from eye lens weight and nitrogen content, dentition, and United States Department of Agriculture maturity score, 3557
leptin
Changes in food intake and circulating leptin due to gastrointestinal parasitism in lambs of two breeds, 1891
limiting amino acid
Limiting amino acids for growing lambs fed a diet low in ruminally undegradable protein, 2627
linear spline
Evaluation of methods for computing approximate accuracies of predicted breeding values in maternal random regression models for growth traits in beef cattle, 1057
linseed
Fatty acid profile and oxidative stability of pork as influenced by duration and time of dietary linseed or fish oil supplementation, 1418
Influence of extruded linseed on growth, carcass composition, and meat quality of slaughtered pigs at one hundred ten and one hundred sixty kilograms of liveweight, 1850
Methane output and diet digestibility in response to feeding dairy cows crude linseed, extruded linseed, or linseed oil, 2642
linseed meal
Impacts of linseed meal and estradiol-17β on mass, cellularity, angiogenic factors, and vascularity of the jejunum, 3014
linseed oil
Methane output and diet digestibility in response to feeding dairy cows crude linseed, extruded linseed, or linseed oil, 2642
lipid
Intramuscular fat content has little influence on the eating quality of fresh pork loin chops, 730
Source of dietary lipid may modify the immune response in stressed feeder cattle, 1382
The effect of dietary copper supplementation on fatty acid profile and oxidative stability of adipose depots in Boer × Spanish goats, 390
lipopolysaccharide
Behavior of dairy calves after a low dose of bacterial endotoxin, 2920
Effect of sodium butyrate on growth performance and response to lipopolysaccharide in weanling pigs, 442
litter size
A regional evaluation of injections of high levels of vitamin A on reproductive performance of sows, 333
Effect of litter size and birth weight on growth, carcass and pork quality, and their relationship to postmortem proteolysis, 2357
live weight
Genetic parameters for early lamb survival and growth in Scottish Blackface sheep, 1758
live yeast
Effect of live yeast culture supplementation on apparent digestibility and rate of passage in horses fed a high-fiber or high-starch diet, 339
liver
Changes of activity and mRNA expression of urea cycle enzymes in the liver of developing Holstein calves, 1526
Translational efficiency of bovine pyruvate carboxylase 5′ untranslated region messenger ribonucleic acid variants, 3401
liver abscess
ASAS Centennial Paper: Contributions in the *Journal of Animal Science* to understanding cattle metabolic and digestive disorders, 1711
Effects of dietary sunflower seeds and tylosin phosphate on production variables, carcass characteristics, fatty acid composition, and liver abscess incidence in crossbred steers, 3125
liver-like
Chemical and sensory properties of beef of known source and finished on wet distillers grains diets containing varying types and levels of roughage, 949
liveweight
Influence of extruded linseed on growth, carcass composition, and meat quality of slaughtered pigs at one hundred ten and one hundred sixty kilograms of liveweight, 1850
Lolium perenne L. ssp. multiflorum (Lam.) Husnot
Animal performance and economic comparison of novel and toxic endophyte tall fescues to cool-season annuals, 2043
longevity
Constitution and evaluation of a long-lived productive rabbit line, 515
Effect of leg conformation on survivability of Duroc, Landrace, and Large White sows, 2392
Factors affecting length of productive life in Swedish commercial sows, 432
longissimus dorsi
Relationship between myosin heavy chain isoform expression and muscling in several diverse pig breeds, 795
longissimus muscle area
B-mode, real-time ultrasound for estimating carcass measures in live sheep: Accuracy of ultrasound measures and their relationships with carcass yield and value, 3203
Technical Note: The USDA beef yield grade equation requires modification to reflect the current longissimus muscle area to hot carcass weight relationship, 1434
longitudinal data
Multi-trait and random regression approaches for addressing the wide range of weaning ages in Asturiana de los Valles beef cattle for genetic parameter estimation, 278
low-phytate corn
Evaluation of NutriDense low-phytate corn and added fat in growing and finishing swine diets, 1556
luminal environment
Influence of dietary fiber on luminal environment and morphology in the small and large intestine of sows, 2217
lupine
The effect of body condition on serum concentrations of two teratogenic alkaloids (anagyrine and ammodendrine) from lupines (*Lupinus* species) that cause crooked calf disease, 2771
luteinizing hormone
Estrogen and progesterone signaling: Genomic and nongenomic actions in domestic ruminants, 299
luteinizing hormone
Gonadotropin-releasing hormone-induced ovulation and luteinizing hormone release in beef heifers: Effect of day of the cycle, 83
lying behavior
Exercising stall-housed gestating gilts: Effects on lameness, the musculo-skeletal system, production, and behavior, 3166
lysergic acid
Effects of selected combinations of tall fescue alkaloids on the vasoconstrictive capacity of fescue-naïve bovine lateral saphenous veins, 1021
lysine
Commercial validation of the true ileal digestible lysine requirement for 11- to 27-kilogram pigs, 324
Determining an optimum lysine:calorie ratio for barrows and gilts in a commercial finishing facility, 2190

M

machine learning
Marker-assisted assessment of genotype by environment interaction: A case study of single nucleotide polymorphism-mortality association in broilers in two hygiene environments, 3358
maintenance
Energy requirements of Texel crossbred lambs, 3480

maintenance energy
Investigations of energy metabolism in weanling barrows: The interaction of dietary energy concentration and daily feed (energy) intake, 348
mammary epithelial cell
Effect of continuous milking and prostaglandin E_2 on milk production and mammary epithelial cell turnover, ultrastructure, and gene expression, 1132
management
Mortality, death interval, survivals, and herd factors for death in gilts and sows in commercial breeding herds, 3159
management system
Effect of feedlot management system on response to ractopamine-HCl in yearling steers, 2401
manganese
Copper deficiency in the young bovine results in dramatic decreases in brain copper concentration but does not alter brain prion protein biology, 3069
manipulation
Manipulation of rumen ecology by dietary lemongrass (*Cymbopogon citratus* Stapf.) powder supplementation, 3497
mannan-oligosaccharides
Use of mannan-oligosaccharides and zinc chelate as growth promoters and diarrhea preventative in weaning pigs: Effects on microbiota and gut function, 94
manure
Effect of a *Bacillus*-based direct-fed microbial feed supplement on growth performance and pen cleaning characteristics of growing-finishing pigs, 1459
Meeting environmental requirements for the land application of manure, 3228
Odorant production and persistence of *Escherichia coli* in manure slurries from cattle fed zero, twenty, forty, or sixty percent wet distillers grains with solubles, 3617
maquis
The effect of polyethylene glycol on intake of Mediterranean shrubs by sheep and goats, 3491
marbling
Effect of vitamin A restriction on carcass characteristics and immune status of beef steers, 1609
Intramuscular fat content has little influence on the eating quality of fresh pork loin chops, 730
marker-assisted selection
Different methods of selecting animals for genotyping to maximize the amount of genetic information known in the population, 2471
Genomic selection using different marker types and densities, 2447
marker-derived relationship matrix
Technical note: Prediction of breeding values using marker-derived relationship matrices, 2089
market survey
National Beef Quality Audit–2005: Survey of targeted cattle and carcass characteristics related to quality, quantity, and value of fed steers and heifers, 3533
National Meat Case Study 2004: Fresh product types and allocation of retail space, 3586
National Meat Case Study 2004: Product labeling information, branding, and packaging trends, 3593
mass spectrometry
CENTENNIAL PAPER: Proteomics in animal science, 2430
mastitis
Effects of dry cow treatment of beef cows on pathogenic organisms, milk somatic cell counts, and calf growth during the subsequent lactation, 748
maternal
Effects of selenium on organ mass and cellularity, 890
maternal behavior
Effects of late introduction of sows to two farrowing environments on the progress of farrowing and maternal behavior, 2730
maternal breed
Reproductive performance and genetic parameters in first cross ewes from different maternal genotypes, 804
maternal effect
Inheritance of pulmonary arterial pressure in Angus cattle and its correlation with growth, 815
maternal genetics
Estimation of maternal variance components considering cow-calf contacts under extensive pastoral systems, 1081
maternal trait
Genetic parameters and predicted selection results for maternal traits related to lactation efficiency in sows, 1067
mathematical model
In vitro gas production profiles to estimate extent and effective first-order rate of neutral detergent fiber digestion in the rumen, 651
Prediction of in vivo neutral detergent fiber digestibility and digestion rate of potentially digestible neutral detergent fiber: Comparison of models, 2657
mathematical modeling
A comparison of methods of fitting several models to nutritional response data, 500
maturity
Meta-analysis of the effect of animal maturity on muscle characteristics in different muscles, breeds, and sexes of cattle, 2872
meal response test
Effects of six carbohydrate sources on diet digestibility and postprandial glucose and insulin responses in cats, 2237
meat goat
Evaluation of secondary protein nutrients as a substitute for soybean meal in diets for beef steers and meat goats, 146
meat grade
National Beef Quality Audit–2005: Survey of targeted cattle and carcass characteristics related to quality, quantity, and value of fed steers and heifers, 3533
meat production
Single nucleotide polymorphisms in several porcine cathepsin genes are associated with growth, carcass, and production traits in Italian Large White pigs, 3300
meat quality
Adenosine monophosphate-activated protein kinase involved in variations of muscle glycogen and breast meat quality between lean and fat chickens, 2888
Bovine quantitative trait loci analysis for growth, carcass, and meat quality traits in an F_2 population from a cross between Japanese Black and Limousin, 2821
Carcass composition and meat quality of equally mature kids and lambs, 1943
Carcass, meat quality, and sensory characteristics of heavy body weight pigs fed ractopamine hydrochloride (Paylean), 3544
Effect of litter size and birth weight on growth, carcass and pork quality, and their relationship to postmortem proteolysis, 2357
Effects of oral administration of sodium citrate or acetate to pigs on blood parameters, postmortem glycolysis, muscle pH decline, and quality attributes of pork, 1669
Effects of the myostatin F94L substitution on beef traits, 1038
Growth performance, carcass characteristics, meat quality, and tissue histology of growing pigs fed crude glycerin-supplemented diets, 2962
Impact of beef cattle diets containing corn or sorghum distillers grains on beef color, fatty acid profiles, and sensory attributes, 923
Influence of extruded linseed on growth, carcass composition, and meat quality of slaughtered pigs at one hundred ten and one hundred sixty kilograms of liveweight, 1850
Quantitative trait loci analysis on *Sus scrofa* chromosome 7 for meat production, meat quality, and carcass traits within a Duroc purebred population, 2833
Quantitative trait locus mapping in an F_2 Duroc × Pietrain resource population: II. Carcass and meat quality traits, 254
Response to dietary phosphorus deficiency is affected by genetic background in growing pigs, 2585
median lethal dose (LD_{50})
The effect of 7,8-methylenedioxylycoctonine-type diterpenoid alkaloids on the toxicity of methyllycaconitine in mice, 2761
melanocortin-1 receptor
Technical note: A novel method for routine genotyping of horse coat color gene polymorphisms, 1291
melanocortin-4 receptor
Central role of the melanocortin-4 receptors in appetite regulation after endotoxin, 2557
melatonin
Light exposure during night suppresses nocturnal increase in growth hormone secretion in Holstein steers, 1799
membrane receptor
Estrogen and progesterone signaling: Genomic and nongenomic actions in domestic ruminants, 299

membrane-associated transporter protein
Technical note: A novel method for routine genotyping of horse coat color gene polymorphisms, 1291
mesenteric adipocyte
Identification of genes downregulated during differentiation of porcine mesenteric adipocytes, 3367
mesenteric adipose tissue
Identification of genes downregulated during differentiation of porcine mesenteric adipocytes, 3367
α-melanocyte-stimulating hormone
Central role of the melanocortin-4 receptors in appetite regulation after endotoxin, 2557
messenger ribonucleic acid expression
Sterol regulatory element binding transcription factor 1 expression and genetic polymorphism significantly affect intramuscular fat deposition in the longissimus muscle of Erhualian and Sutai pigs, 57
meta-analysis
Meta-analysis of the effect of animal maturity on muscle characteristics in different muscles, breeds, and sexes of cattle, 2872
Nitrogen transactions along the gastrointestinal tract of cattle: A meta-analytical approach, 660
metabolic acidosis
Plasma amino acid profile and expression of the ubiquitin-mediated proteolytic pathway in lambs with induced metabolic acidosis, 2651
metabolic hormone
Effects of selenium supply and dietary restriction on maternal and fetal metabolic hormones in pregnant ewe lambs, 1254
metabolic profile
Individual variability in physiological adaptation to metabolic stress during early lactation in dairy cows kept under equal conditions, 2903
metabolism
Dietary tryptophan helps to preserve tryptophan homeostasis in pigs suffering from lung inflammation, 3473
Effects of supplementation frequency on performance, reproductive, and metabolic responses of Brahman-crossbred females, 2296
Feeding distillers grains supplements to improve amino acid nutriture of lambs consuming moderate-quality forages, 691
Intestinal metabolism of weaned piglets fed a typical United States or European diet with or without supplementation of tributyrin and lactitol, 2952
Nutrient net absorption across the portal-drained viscera of forage-fed beef steers: Quantitative assessment and application to a nutritional prediction model, 2277
Use of computer simulation to teach a systems approach to metabolism, 483
metabolizable energy
Digestible and metabolizable energy of crude glycerol for growing pigs, 602
methane
In vitro methane emission and acetate:propionate ratio are decreased when artificial stimulation of the rumen wall is combined with increasing grain diets in sheep, 384
Methane output and diet digestibility in response to feeding dairy cows crude linseed, extruded linseed, or linseed oil, 2642
Model for estimating enteric methane emissions from United States dairy and feedlot cattle, 2738
Odorant production and persistence of *Escherichia coli* in manure slurries from cattle fed zero, twenty, forty, or sixty percent wet distillers grains with solubles, 3617
methanogen
In vitro methane emission and acetate:propionate ratio are decreased when artificial stimulation of the rumen wall is combined with increasing grain diets in sheep, 384
methionine
An estimate of the methionine requirement and its variability in growing pigs using the indicator amino acid oxidation technique, 364
Cyst(e)ine imbalance and its effect on methionine precursor utilization in chicks, 1832
methodology
Technical Note: Comparison of traditional needle vaccination with pneumatic, needle-free vaccination for sheep, 1468
methyllycaconitine
The effect of 7,8-methylenedioxylycoctonine-type diterpenoid alkaloids on the toxicity of methyllycaconitine in mice, 2761
microarray
Differential expression in lung and bronchial lymph node of pigs with high and low responses to infection with porcine reproductive and respiratory syndrome virus, 3279
microbial ecology
Evaluation of alternatives to antibiotics using an *Escherichia coli* K88$^+$ model of piglet diarrhea: Effects on gut microbial ecology, 836
microbial fermentation
Changes in rumen microbial fermentation are due to a combined effect of type of diet and pH, 702
microbial protein synthesis
Influence of direct-fed fibrolytic enzymes on diet digestibility and ruminal activity in sheep fed a grass hay-based diet, 1617
Manipulation of rumen ecology by dietary lemongrass (*Cymbopogon citratus* Stapf.) powder supplementation, 3497
microflora
Effects of dietary short-chain fructooligosaccharides on the intestinal microflora of horses subjected to a sudden change in diet, 316
microorganism
BOARD-INVITED REVIEW: Recent advances in biohydrogenation of unsaturated fatty acids within the rumen microbial ecosystem, 397
microsatellite
Genetic diversity in native and commercial breeds of pigs in Portugal assessed by microsatellites, 2496
Genetic relationship and diversity analysis of Indian water buffalo (*Bubalus bubalis*), 1495
milk fatty acid
Effects of supplementing fish oil in the drinking water of dairy cows on production performance and milk fatty acid composition, 720
milk production
Milk yield, milk composition, eating behavior, and lamb performance of ewes fed diets containing soybean hulls replacing coastcross (*Cynodon* species) hay, 3511
milk yield
Milk yield of primiparous beef cows from three calving systems and varied weaning ages, 768
mineral
Effects of dietary organic and inorganic trace mineral levels on sow reproductive performances and daily mineral intakes over six parities' 2247
Reducing phosphorus inputs for grazing Holstein steers, 712
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the composition of pork from female pigs, 1145
mitochondrial DNA
Interpopulation and intrapopulation maternal lineage genetics of the Lanyu pig (*Sus scrofa*) by analysis of mitochondrial cytochrome b and control region sequences, 2461
Mitochondrial genome polymorphisms associated with longissimus muscle composition in Iberian pigs, 1283
modeling
BOARD-INVITED REVIEW: Recent advances in biohydrogenation of unsaturated fatty acids within the rumen microbial ecosystem, 397
Model for estimating enteric methane emissions from United States dairy and feedlot cattle, 2738
modified atmosphere packaging
Effects of dark storage and retail display on beef chuck and round muscles enhanced with ammonium hydroxide, salt, and carbon monoxide, 972
Effects of different packaging atmospheres and injection-enhancement on beef tenderness, sensory attributes, desmin degradation, and display color, 2697
Effects of packaging atmospheres on beef instrumental tenderness, fresh color stability, and internal cooked color, 1191
molasses
Effects of supplement type and selenium source on measures of growth and selenium status in yearling beef steers, 1472
molecular information
Technical note: Computing options for genetic evaluation with a large number of genetic markers, 1514
monensin
Efficacy of monensin and tylosin in finishing diets based on steam-flaked corn with and without corn wet distillers grains with solubles, 2270

monocalcium phosphate
Influence of dietary phosphorus concentration on the digestibility of phosphorus in monocalcium phosphate by growing pigs, 1861
monoterpene
Effects of *cis*-β-ocimene, *cis*-sabinene hydrate, and monoterpene and sesquiterpene mixtures on alfalfa pellet intake by lambs, 1478
monounsaturated fatty acid
Relationships between monounsaturated fatty acids of marbling flecks and image analysis traits in longissimus muscle for Japanese Black steers, 3551
morphology
Influence of dietary fiber on luminal environment and morphology in the small and large intestine of sows, 2217
mortality
Factors affecting length of productive life in Swedish commercial sows, 432
Marker-assisted assessment of genotype by environment interaction: A case study of single nucleotide polymorphism-mortality association in broilers in two hygiene environments, 3358
Mortality, death interval, survivals, and herd factors for death in gilts and sows in commercial breeding herds, 3159
mRNA
Changes of activity and mRNA expression of urea cycle enzymes in the liver of developing Holstein calves, 1526
multibreed
Genetic evaluation of growth in a multibreed beef cattle population using random regression-linear spline models, 267
multiple breed genetic evaluations
Estimation of accuracy and bias in genetic evaluations with genetic groups using sampling, 1047
multiple generation
Quantitative trait loci analysis on *Sus scrofa* chromosome 7 for meat production, meat quality, and carcass traits within a Duroc purebred population, 2833
multiple trait
Genetic associations of sow longevity with age at first farrowing, number of piglets weaned, and wean to insemination interval in the Finnish Landrace swine population, 3324
multiple-sire mating
Behavioral aspects of electronic bull separation and mate allocation in multiple-sire mating paddocks, 1690
muscle
Ankyrin repeat and suppressor of cytokine signaling (SOCS) box-containing protein (ASB) 15 alters differentiation of mouse C_2C_{12} myoblasts and phosphorylation of mitogen-activated protein kinase and Akt, 2897
Effects of implants of trenbolone acetate, estradiol, or both, on muscle insulin-like growth factor-I, insulin-like growth factor-I receptor, estrogen receptor-α, and androgen receptor messenger ribonucleic acid levels in feedlot steers, 3418
Meta-analysis of the effect of animal maturity on muscle characteristics in different muscles, breeds, and sexes of cattle, 2872
muscle fiber
A quantitative trait locus genome scan for porcine muscle fiber traits reveals overdominance and epistasis, 3290
muscle property
Chemical properties of cow and beef muscles: Benchmarking the differences and similarities, 1904
muscle weight
Exercising stall-housed gestating gilts: Effects on lameness, the musculo-skeletal system, production, and behavior, 3166
mutation
Sterol regulatory element binding transcription factor 1 expression and genetic polymorphism significantly affect intramuscular fat deposition in the longissimus muscle of Erhualian and Sutai pigs, 57
Mycobacterium avium ssp. paratuberculosis
Familial and herd-level associations with paratuberculosis enzyme-linked immunosorbent assay status in beef cattle, 1977
myoblast
Ankyrin repeat and suppressor of cytokine signaling (SOCS) box-containing protein (ASB) 15 alters differentiation of mouse C_2C_{12} myoblasts and phosphorylation of mitogen-activated protein kinase and Akt, 2897
myogenin
Ectopic expression of porcine peroxisome proliferator-activated receptor δ regulates adipogenesis in mouse myoblasts, 64
myosin heavy chain
Differential response of cull cow muscles to the hypertrophic actions of ractopamine-hydrogen chloride, 3568
Relationship between myosin heavy chain isoform expression and muscling in several diverse pig breeds, 795
myostatin
Effects of the myostatin F94L substitution on beef traits, 1038

N

n-3 polyunsaturated fatty acid
Influence of extruded linseed on growth, carcass composition, and meat quality of slaughtered pigs at one hundred ten and one hundred sixty kilograms of liveweight, 1850
N-acetylloline
Effects of selected combinations of tall fescue alkaloids on the vasoconstrictive capacity of fescue-naïve bovine lateral saphenous veins, 1021
native breed
Genetic diversity in native and commercial breeds of pigs in Portugal assessed by microsatellites, 2496
near-infrared
Predicting beef tenderness using near-infrared spectroscopy, 211
Using the near-infrared system to sort various beef middle and end muscle cuts into tenderness categories, 413
near-infrared reflectance spectroscopy
A fecal near-infrared reflectance spectroscopy-aided methodology to determine goat dietary composition in a Mediterranean shrubland, 1345
Nellore
A meta-analysis of energy and protein requirements for maintenance and growth of Nellore cattle, 1588
Evaluation of carcass characteristics of *Bos indicus* and tropically adapted *Bos taurus* breeds selected for postweaning weight, 1770
nematode
Changes in food intake and circulating leptin due to gastrointestinal parasitism in lambs of two breeds, 1891
Neotyphodium coenophialum
Animal performance and economic comparison of novel and toxic endophyte tall fescues to cool-season annuals, 2043
Neotyphodium lolii
Animal performance and economic comparison of novel and toxic endophyte tall fescues to cool-season annuals, 2043
net energy
A meta-analysis of energy and protein requirements for maintenance and growth of Nellore cattle, 1588
ASAS CENTENNIAL PAPER: Net energy systems for beef cattle—Concepts, application, and future models, 2779
Investigations of energy metabolism in weanling barrows: The interaction of dietary energy concentration and daily feed (energy) intake, 348
Technical Note: Do dietary net energy values calculated from performance data offer increased sensitivity for detecting treatment differences?, 2756
net protein
A meta-analysis of energy and protein requirements for maintenance and growth of Nellore cattle, 1588
nitrogen
Effect of soluble and insoluble fiber on energy digestibility, nitrogen retention, and fiber digestibility of diets fed to gestating sows, 2568
Effects of crude protein intake from grass silage-only diets on the equine colon ecosystem after an abrupt feed change, 3465
Nitrogen and mineral balance of lambs artificially infected with *Haemonchus contortus* and fed tanniferous sainfoin (*Onobrychis viciifolia*), 1879
Nitrogen transactions along the gastrointestinal tract of cattle: A meta-analytical approach, 660
nitrogen balance
Effect of common antinutritive factors and fibrous feedstuffs in pig diets on amino acid digestibilities with special emphasis on threonine, 609
Evaluation of secondary protein nutrients as a substitute for soybean meal in diets for beef steers and meat goats, 146
nitrogen retention
Limiting amino acids for growing lambs fed a diet low in ruminally undegradable protein, 2627
nitrogen utilization
Effect of rumen-degradable protein balance deficit on voluntary intake, microbial protein synthesis, and nitrogen metabolism in growing double-muscled Belgian Blue bulls fed corn silage-based diet, 680

nonambulatory
Effects of season and distance moved during loading on transport losses of market-weight pigs in two commercially available types of trailer, 3137
Frequency of the HAL-1843 mutation of the ryanodine receptor gene in dead and nonambulatory-noninjured pigs on arrival at the packing plant, 511
nonessential amino acid
Effects of ammonia load on glucose metabolism by isolated ovine duodenal mucosa, 2321
nonforage fiber source
Milk yield, milk composition, eating behavior, and lamb performance of ewes fed diets containing soybean hulls replacing coastcross (*Cynodon* species) hay, 3511
nonprotein nitrogen
Effects of dietary nonprotein nitrogen on performance, digestibility, ruminal characteristics, and microbial efficiency in crossbred steers, 1173
nursery diet
Effects of adding fibrous feedstuffs to the diet of young pigs on growth performance, intestinal cytokines, and circulating acute-phase proteins, 871
nursery pig
Commercial validation of the true ileal digestible lysine requirement for 11- to 27-kilogram pigs, 324
nursing beef cow
Conjugated linoleic acid content in adipose tissue of calves suckling beef cows on pasture and supplemented with raw or extruded soybeans, 1624
nutrient
Effects of dietary supplementation of an enzyme blend on the ileal and fecal digestibility of nutrients in growing pigs, 1533
Effects of supplemental fat source on nutrient digestion and ruminal fermentation in steers, 640
nutrient absorption
Effect of low doses of *Aspergillus niger* phytase on growth performance, bone strength, and nutrient absorption and excretion by growing and finishing swine fed corn-soybean meal diets deficient in available phosphorus and calcium, 858
nutrient composition
Effects of conventional and grass-feeding systems on the nutrient composition of beef, 3575
nutrient deposition
Investigations of energy metabolism in weanling barrows: The interaction of dietary energy concentration and daily feed (energy) intake, 348
nutrient digestibility
Nutrient digestibility and performance responses of growing pigs fed phytase- and xylanase-supplemented wheat-based diets, 848
Potato (*Solanum tuberosum* L. cv. Gogu valley) protein as a novel antimicrobial agent in weanling pigs, 1562
The effects of feeding rice in substitution of corn and the degree of starch gelatinization of rice on the digestibility of dietary components and productive performance of young pigs, 119
nutrient excretion
Effect of low doses of *Aspergillus niger* phytase on growth performance, bone strength, and nutrient absorption and excretion by growing and finishing swine fed corn-soybean meal diets deficient in available phosphorus and calcium, 858
nutrient flow
Matching plant and animal processes to alter nutrient supply in strip-grazed cattle: Timing of herbage and fasting allocation, 1006
nutrient restriction
Prolonged, moderate nutrient restriction in beef cattle results in persistently elevated circulating ghrelin concentration, 564
nutrition
Baggs ewes adapt to maternal undernutrition and maintain conceptus growth by maintaining fetal plasma concentrations of amino acids, 820
Use of computer simulation to teach a systems approach to metabolism, 483
nutritional level
Effects of gestational plane of nutrition and selenium supplementation on mammary development and colostrum quality in pregnant ewe lambs, 2415
nutritional requirement
A comparison of methods of fitting several models to nutritional response data, 500

O

odor
Odorant production and persistence of *Escherichia coli* in manure slurries from cattle fed zero, twenty, forty, or sixty percent wet distillers grains with solubles, 3617
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the quality of pork from female pigs, 1402
oil
Effect of dietary soybean oil and soybean protein concentration on the concentration of digestible amino acids in soybean products fed to growing pigs, 1841
oleic acid
Cobalt supplied per os reduces the mammary Δ^9-desaturase index of bovine milk, 3062
omasum
Uptake of zinc from zinc sulfate and zinc proteinate by ovine ruminal and omasal epithelia, 1357
omega-3 fatty acid
Circulating fatty acid profiles in response to three levels of dietary omega-3 fatty acid supplementation in horses, 1114
Fatty acid profile and oxidative stability of pork as influenced by duration and time of dietary linseed or fish oil supplementation, 1418
ontology
Animal trait ontology: The importance and usefulness of a unified trait vocabulary for animal species, 1485
organic zinc
Use of mannan-oligosaccharides and zinc chelate as growth promoters and diarrhea preventative in weaning pigs: Effects on microbiota and gut function, 94
overdominance
A quantitative trait locus genome scan for porcine muscle fiber traits reveals overdominance and epistasis, 3290
ovine
Effects of ammonia load on glucose metabolism by isolated ovine duodenal mucosa, 2321
Technical note: Transfer of ovine embryos through a simplified mini-laparotomy technique, 3224
ovulation
Comparison of protocols to synchronize estrus and ovulation in estrous-cycling and prepubertal beef heifers, 1808
Effect of ovulatory follicle size and expression of estrus on progesterone secretion in beef cows, 553
Gonadotropin-releasing hormone-induced ovulation and luteinizing hormone release in beef heifers: Effect of day of the cycle, 83
ovulation rate
Conceptus development during blastocyst elongation in lines of pigs selected for increased uterine capacity or ovulation rate, 2126
ovulation synchronization
Evaluation of human chorionic gonadotropin as a replacement for gonadotropin-releasing hormone in ovulation-synchronization protocols before fixed timed artificial insemination in beef cattle, 2539
oxidative stability
Fatty acid profile and oxidative stability of pork as influenced by duration and time of dietary linseed or fish oil supplementation, 1418
oxytocin
Estrogen and progesterone signaling: Genomic and nongenomic actions in domestic ruminants, 299

P

package
National Meat Case Study 2004: Product labeling information, branding, and packaging trends, 3593
palatability
Effects of feeding distillers dried grains with solubles, high-protein distillers dried grains, and corn germ to growing-finishing pigs on pig performance, carcass quality, and the palatability of pork, 1819
Effects of ractopamine supplementation and postmortem aging on longissimus muscle palatability of beef steers differing in biological type, 205
pancreas
Pancreatic mass, cellularity, and α-amylase and trypsin activity in feedlot steers fed diets differing in crude protein concentration, 909

Panicum virgatum
The interaction of harvesting time of day of switchgrass hay and ruminal degradability of supplemental protein offered to beef steers, 159
parabiotic
Uptake of zinc from zinc sulfate and zinc proteinate by ovine ruminal and omasal epithelia, 1357
parentage identification
Parentage identification using single nucleotide polymorphism genotypes: Application to product tracing, 2508
partial fractionation
Corn distillers grains with solubles derived from a traditional or partial fractionation process: Growth performance and carcass characteristics of finishing feedlot heifers, 2338
particle size
Effect of intake level and alfalfa substitution for grass hay on ruminal kinetics of fiber digestion and particle passage in beef cattle, 134
Milk yield, milk composition, eating behavior, and lamb performance of ewes fed diets containing soybean hulls replacing coastcross (*Cynodon* species) hay, 3511
passage rate
Effect of intake level and alfalfa substitution for grass hay on ruminal kinetics of fiber digestion and particle passage in beef cattle, 134
pasture
Conjugated linoleic acid content in adipose tissue of calves suckling beef cows on pasture and supplemented with raw or extruded soybeans, 1624
Corn oil or corn grain supplementation to steers grazing endophyte-free tall fescue. I. Effects on in vivo digestibility, performance, and carcass quality, 3215
paternity test
The value of DNA paternity identification in beef cattle: Examples from Nevada's free-range ranches, 17
pathogen
A putative quantitative trait locus on chromosome 20 associated with bovine pathogenic disease incidence, 2455
pectin
The effect of dietary phosphorus and calcium level, phytase supplementation, and ileal infusion of pectin on the chemical composition and carbohydrase activity of fecal bacteria and the level of microbial metabolites in the gastrointestinal tract of pigs, 1544
pedigree analysis
Genetic variability in Colombian Creole cattle populations estimated by pedigree information, 545
pelleting
Effect of crude glycerol on pellet mill production and nursery pig growth performance, 2228
pelvic area
Experimental selection for calving ease and postnatal growth in seven cattle populations. II. Phenotypic differences, 2103
PepT1
BOARD-INVITED REVIEW: Peptide absorption and utilization: Implications for animal nutrition and health, 2135
peptide
BOARD-INVITED REVIEW: Peptide absorption and utilization: Implications for animal nutrition and health, 2135
performance
Effect of soluble and insoluble dietary fiber on embryo survival and sow performance, 2576
Effect of the number of concentrate feeding places per pen on performance, behavior, and welfare indicators of Friesian calves during the first month after arrival at the feedlot, 419
Effects of commingling beef calves from different sources and weaning protocols during a forty-two-day receiving period on performance and bovine respiratory disease, 3146
Effects of duration of zilpaterol hydrochloride feeding and days on the finishing diet on feedlot cattle performance and carcass traits, 2005
Effects of feeding distillers dried grains with solubles, high-protein distillers dried grains, and corn germ to growing-finishing pigs on pig performance, carcass quality, and the palatability of pork, 1819
Effects of shaded versus unshaded wallows on behavior, performance, and physiology of the outdoor lactating sow, 3628
Effects of supplementation frequency on performance, reproductive, and metabolic responses of Brahman-crossbred females, 2296
Effects of sweeteners on individual feed intake characteristics and performance in group-housed weanling pigs, 2990
Influence of dry-rolling and tempering agent addition during the steam-flaking of sorghum grain on its feeding value for feedlot cattle, 916
Performance by feedlot steers and heifers: Daily gain, mature body weight, dry matter intake, and dietary energetics, 2680
The effect of heated mash on performance and feeding behavior of newly weaned piglets, 3600
peroxisome proliferator-activated receptor δ
Ectopic expression of porcine peroxisome proliferator-activated receptor δ regulates adipogenesis in mouse myoblasts, 64
peroxisome proliferator-activated receptor γ
Ectopic expression of porcine peroxisome proliferator-activated receptor δ regulates adipogenesis in mouse myoblasts, 64
peroxisome proliferator-activated receptor gamma
Differentiation of bovine intramuscular and subcutaneous stromal-vascular cells exposed to dexamethasone and troglitazone, 2531
Docosahexaenoic acid regulates adipogenic genes in myoblasts via porcine peroxisome proliferator-activated receptor γ, 3385
persistent infection
Effects of long- or short-term exposure to a calf identified as persistently infected with bovine viral diarrhea virus on feedlot performance of freshly weaned, transport-stressed beef heifers, 1917
pH
Adenosine monophosphate-activated protein kinase involved in variations of muscle glycogen and breast meat quality between lean and fat chickens, 2888
Changes in rumen microbial fermentation are due to a combined effect of type of diet and pH, 702
Effect of the magnitude of the decrease of rumen pH on rumen fermentation in a dual-flow continuous culture system, 378
Effects of crude protein intake from grass silage-only diets on the equine colon ecosystem after an abrupt feed change, 3465
In vitro methane emission and acetate:propionate ratio are decreased when artificial stimulation of the rumen wall is combined with increasing grain diets in sheep, 384
Physicochemical properties of meat of Italian Heavy Draft horses slaughtered at the age of eleven months, 1205
Recovering value from beef carcasses classified as dark cutters by United States Department of Agriculture graders, 1658
pH enhancement
Effects of aging on beef chuck and loin muscles enhanced with ammonium hydroxide and salt, 1200
phenotype
Animal trait ontology: The importance and usefulness of a unified trait vocabulary for animal species, 1485
phenotypic plasticity
Genotype by environment interaction for lamb weaning weight in two Norwegian sheep breeds, 33
phosphorus
Effect of low doses of *Aspergillus niger* phytase on growth performance, bone strength, and nutrient absorption and excretion by growing and finishing swine fed corn-soybean meal diets deficient in available phosphorus and calcium, 858
Influence of dietary phosphorus concentration on the digestibility of phosphorus in monocalcium phosphate by growing pigs, 1861
Learned appetites for calcium, phosphorus, and sodium in sheep, 738
Reducing phosphorus inputs for grazing Holstein steers, 712
Response to dietary phosphorus deficiency is affected by genetic background in growing pigs, 2585
The effect of dietary phosphorus and calcium level, phytase supplementation, and ileal infusion of pectin on the chemical composition and carbohydrase activity of fecal bacteria and the level of microbial metabolites in the gastrointestinal tract of pigs, 1544
phosphorus excretion
Utilization of distillers dried grains with solubles and phytase in sow lactation diets to meet the phosphorus requirement of the sow and reduce fecal phosphorus concentration, 112
photic stimulation
Light exposure during night suppresses nocturnal increase in growth hormone secretion in Holstein steers, 1799
phylogenetic relationship
Interpopulation and intrapopulation maternal lineage genetics of the Lanyu pig (*Sus scrofa*) by analysis of mitochondrial cytochrome b and control region sequences, 2461
physiology
Effects of shaded versus unshaded wallows on behavior, performance, and physiology of the outdoor lactating sow, 3628

The effects of R-salbutamol on behavior and physiology of finishing pigs, 3110
Transportation of young beef bulls alters circulating physiological parameters that may be effective biomarkers of stress, 1325
phytase
Effect of diet containing phytate and phytase on the activity and messenger ribonucleic acid expression of carbohydrase and transporter in chickens, 3432
Effect of low doses of *Aspergillus niger* phytase on growth performance, bone strength, and nutrient absorption and excretion by growing and finishing swine fed corn-soybean meal diets deficient in available phosphorus and calcium, 858
Nutrient digestibility and performance responses of growing pigs fed phytase- and xylanase-supplemented wheat-based diets, 848
The effect of dietary phosphorus and calcium level, phytase supplementation, and ileal infusion of pectin on the chemical composition and carbohydrase activity of fecal bacteria and the level of microbial metabolites in the gastrointestinal tract of pigs, 1544
The effect of microbial phytase on true and apparent ileal amino acid digestibilities in growing-finishing pigs, 1598
Utilization of distillers dried grains with solubles and phytase in sow lactation diets to meet the phosphorus requirement of the sow and reduce fecal phosphorus concentration, 112
phytate
Effect of diet containing phytate and phytase on the activity and messenger ribonucleic acid expression of carbohydrase and transporter in chickens, 3432
phytoestrogen
Impacts of linseed meal and estradiol-17β on mass, cellularity, angiogenic factors, and vascularity of the jejunum, 3014
pig
A quantitative trait locus genome scan for porcine muscle fiber traits reveals overdominance and epistasis, 3290
An evaluation of natural (*RRR*-α-tocopheryl acetate) and synthetic (all-*rac*-α-tocopheryl acetate) vitamin E fortification in the diet or drinking water of weanling pigs, 584
Assessment of lactose level in the mid- to late-nursery phase on performance of weanling pigs, 127
Citrulline and intestinal fatty acid-binding protein: Longitudinal markers of postweaning small intestinal function in pigs?, 3440
Conceptus development during blastocyst elongation in lines of pigs selected for increased uterine capacity or ovulation rate, 2126
Cryptorchidism and sex ratio are associated in dogs and pigs, 2480
Dietary tryptophan helps to preserve tryptophan homeostasis in pigs suffering from lung inflammation, 3473
Differential expression in lung and bronchial lymph node of pigs with high and low responses to infection with porcine reproductive and respiratory syndrome virus, 3279
Digestible and metabolizable energy of crude glycerol for growing pigs, 602
Docosahexaenoic acid regulates adipogenic genes in myoblasts via porcine peroxisome proliferator-activated receptor γ, 3385
Dynamics of body protein deposition and changes in body composition after sudden changes in amino acid intake: I. Barrows, 2156
Dynamics of body protein deposition and changes in body composition after sudden changes in amino acid intake: II. Entire male pigs, 2168
Ectopic expression of porcine peroxisome proliferator-activated receptor δ regulates adipogenesis in mouse myoblasts, 64
Effect of chromium source on tissue concentration of chromium in pigs, 2971
Effect of common antinutritive factors and fibrous feedstuffs in pig diets on amino acid digestibilities with special emphasis on threonine, 609
Effect of crude glycerol on pellet mill production and nursery pig growth performance, 2228
Effect of dietary soybean oil and soybean protein concentration on the concentration of digestible amino acids in soybean products fed to growing pigs, 1841
Effect of litter size and birth weight on growth, carcass and pork quality, and their relationship to postmortem proteolysis, 2357
Effects of adding fibrous feedstuffs to the diet of young pigs on growth performance, intestinal cytokines, and circulating acute-phase proteins, 871
Effects of chito-oligosaccharide supplementation on the growth performance, nutrient digestibility, intestinal morphology, and fecal shedding of *Escherichia coli* and *Lactobacillus* in weaning pigs, 2609
Effects of coextrusion of flaxseed and field pea on the digestibility of energy, ether extract, fatty acids, protein, and amino acids in grower-finisher pigs, 2942
Effects of dietary organic and inorganic trace mineral levels on sow reproductive performances and daily mineral intakes over six parities' 2247
Effects of feeding distillers dried grains with solubles, high-protein distillers dried grains, and corn germ to growing-finishing pigs on pig performance, carcass quality, and the palatability of pork, 1819
Effects of neonatal iron status, iron injections at birth, and weaning in young pigs from sows fed either organic or inorganic trace minerals, 2261
Effects of season and distance moved during loading on transport losses of market-weight pigs in two commercially available types of trailer, 3137
Effects of xylanase supplementation on the apparent digestibility and digestible content of energy, amino acids, phosphorus, and calcium in wheat and wheat by-products from dry milling fed to grower pigs, 3450
Estimates of genetic parameters for kyphosis in two crossbred swine populations, 1765
Evaluation of a dynamic in vitro model to simulate the porcine ileal digestion of diets differing in carbohydrate composition, 1156
Factors affecting the variability in ileal amino acid digestibility in corn distillers dried grains with solubles fed to growing pigs, 2180
Fasting regulates the expression of adiponectin receptors in young growing pigs, 3377
Frequency of the HAL-1843 mutation of the ryanodine receptor gene in dead and nonambulatory-noninjured pigs on arrival at the packing plant, 511
Genetic components of heat stress in finishing pigs: Development of a heat load function, 2082
Genetic components of heat stress in finishing pigs: Parameter estimation, 2076
Genetic diversity in native and commercial breeds of pigs in Portugal assessed by microsatellites, 2496
Growth of protein, moisture, lipid, and ash of two genetic lines of barrows and gilts from twenty to one hundred twenty-five kilograms of body weight, 460
Influence of dietary phosphorus concentration on the digestibility of phosphorus in monocalcium phosphate by growing pigs, 1861
Influence of extruded linseed on growth, carcass composition, and meat quality of slaughtered pigs at one hundred ten and one hundred sixty kilograms of liveweight, 1850
Net joint kinetics in the limbs of pigs walking on concrete floor in dry and contaminated conditions, 992
Optimum duration of performance tests for evaluating growing pigs for growth and feed efficiency traits, 1096
Parentage identification using single nucleotide polymorphism genotypes: Application to product tracing, 2508
Physiological and immunological responses to weaning and transport in the young pig: Modulation by administration of porcine somatotropin, 2913
Porcine adipose triglyceride lipase complementary deoxyribonucleic acid clone, expression pattern, and regulation by resveratrol, 1781
Prediction of in vivo apparent total tract energy digestibility of barley in grower pigs using an in vitro digestibility technique, 2619
Quantitative trait loci mapping in an F_2 Duroc × Pietrain resource population: 1. Growth traits, 241
Quantitative trait locus mapping in an F_2 Duroc × Pietrain resource population: II. Carcass and meat quality traits, 254
Regional differences in porcine adipocytes isolated from skeletal muscle and adipose tissues as identified by a proteomic approach, 2115
Relationship between myosin heavy chain isoform expression and muscling in several diverse pig breeds, 795
Response to dietary phosphorus deficiency is affected by genetic background in growing pigs, 2585
Selection response and genetic parameters for residual feed intake in Yorkshire swine, 287
Single nucleotide polymorphisms in several porcine cathepsin genes are associated with growth, carcass, and production traits in Italian Large White pigs, 3300
Sterol regulatory element binding transcription factor 1 expression and genetic polymorphism significantly affect intramuscular fat deposition in the longissimus muscle of Erhualian and Sutai pigs, 57
Technical note: Evaluation of the official identification system for pigs for sale in New South Wales, 472

The effect of dietary phosphorus and calcium level, phytase supplementation, and ileal infusion of pectin on the chemical composition and carbohydrase activity of fecal bacteria and the level of microbial metabolites in the gastrointestinal tract of pigs, 1544
The effect of microbial phytase on true and apparent ileal amino acid digestibilities in growing-finishing pigs, 1598
The effects of R-salbutamol on behavior and physiology of finishing pigs, 3110
The effects of sex and slaughter weight on growth performance and carcass traits of pigs intended for dry-cured ham from Teruel (Spain), 1933
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the composition of pork from female pigs, 1145
pig performance
Nutrient digestibility and performance responses of growing pigs fed phytase- and xylanase-supplemented wheat-based diets, 848
The effects of feeding rice in substitution of corn and the degree of starch gelatinization of rice on the digestibility of dietary components and productive performance of young pigs, 119
piglet
Effect of drinker type on water intake and waste in newly weaned piglets, 1439
Effects of sweeteners on individual feed intake characteristics and performance in group-housed weanling pigs, 2990
Evaluation of alternatives to antibiotics using an *Escherichia coli* K88$^+$ model of piglet diarrhea: Effects on gut microbial ecology, 836
Intestinal metabolism of weaned piglets fed a typical United States or European diet with or without supplementation of tributyrin and lactitol, 2952
Isoleucine and valine supplementation of a low-protein corn-wheat-soybean meal-based diet for piglets: Growth performance and nitrogen balance, 2936
Survival analysis of preweaning piglet survival in a dry-cured ham-producing crossbred line, 2486
The effect of heated mash on performance and feeding behavior of newly weaned piglets, 3600
pigs
Effects of housing finishing pigs in two group sizes and at two floor space allocations on production, health, behavior, and physiological variables, 982
pine needle
Effect of body condition on consumption of pine needles (*Pinus ponderosa*) by beef cows, 3608
Pinus ponderosa
Effect of body condition on consumption of pine needles (*Pinus ponderosa*) by beef cows, 3608
plasma
Transportation of young beef bulls alters circulating physiological parameters that may be effective biomarkers of stress, 1325
plasma lipid
Source of dietary lipid may modify the immune response in stressed feeder cattle, 1382
polioencephalomalacia
ASAS Centennial Paper: Contributions in the *Journal of Animal Science* to understanding cattle metabolic and digestive disorders, 1711
polyethylene glycol
Nitrogen and mineral balance of lambs artificially infected with *Haemonchus contortus* and fed tanniferous sainfoin (*Onobrychis viciifolia*), 1879
polyunsaturated fatty acid
Circulating fatty acid profiles in response to three levels of dietary omega-3 fatty acid supplementation in horses, 1114
population structure
Indicators of genetic erosion in an endangered population: The Alentejana cattle breed in Portugal, 47
porcine
Identification of genes downregulated during differentiation of porcine mesenteric adipocytes, 3367
porcine reproductive and respiratory syndrome virus resistance
Differential expression in lung and bronchial lymph node of pigs with high and low responses to infection with porcine reproductive and respiratory syndrome virus, 3279
pork
Effects of oral administration of sodium citrate or acetate to pigs on blood parameters, postmortem glycolysis, muscle pH decline, and quality attributes of pork, 1669
Fatty acid profile and oxidative stability of pork as influenced by duration and time of dietary linseed or fish oil supplementation, 1418
Interactive effect of ractopamine and dietary fat source on pork quality characteristics of fresh pork chops during simulated retail display, 2711
Intramuscular fat content has little influence on the eating quality of fresh pork loin chops, 730
pork color
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the quality of pork from female pigs, 1402
pork quality
Influence of sex and castration of females on growth performance and carcass and meat quality of heavy pigs destined for the dry-cured industry, 1410
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the quality of pork from female pigs, 1402
portal-drained viscera
Nutrient net absorption across the portal-drained viscera of forage-fed beef steers: Quantitative assessment and application to a nutritional prediction model, 2277
postmortem
Caspase 3 is not likely involved in the postmortem tenderization of beef muscle, 960
postmortem proteolysis
Effects of different packaging atmospheres and injection-enhancement on beef tenderness, sensory attributes, desmin degradation, and display color, 2697
postpartum
Effects of body condition score at parturition and postpartum protein supplementation on estrous behavior and size of the dominant follicle in beef cows, 2549
postweaning diarrhea
Use of mannan-oligosaccharides and zinc chelate as growth promoters and diarrhea preventative in weaning pigs: Effects on microbiota and gut function, 94
postweaning fertility
Responses to delayed estrus after weaning in sows using oral progestagen treatment, 1996
potato protein
Potato (*Solanum tuberosum* L. cv. Gogu valley) protein as a novel antimicrobial agent in weanling pigs, 1562
preadipocyte
Optimization of in vitro conditions for bovine subcutaneous and intramuscular preadipocyte differentiation, 73
prebiotic
Effects of dietary short-chain fructooligosaccharides on the intestinal microflora of horses subjected to a sudden change in diet, 316
preconditioning
Effects of preshipping management on measures of stress and performance of beef steers during feedlot receiving, 2016
preference
Learned appetites for calcium, phosphorus, and sodium in sheep, 738
pregnancy
Baggs ewes adapt to maternal undernutrition and maintain conceptus growth by maintaining fetal plasma concentrations of amino acids, 820
Changes in glutamine metabolism indicate a mild catabolic state in the transition mare, 3424
Effects of gestational plane of nutrition and selenium supplementation on mammary development and colostrum quality in pregnant ewe lambs, 2415
Effects of selenium on organ mass and cellularity, 890
Effects of selenium supply and dietary restriction on maternal and fetal metabolic hormones in pregnant ewe lambs, 1254
pregnancy rate
Timing of artificial insemination in postpartum beef cows following administration of the CO-Synch + controlled internal drug-release protocol, 1519
prenatal
Prenatal stress effects on pig development and response to weaning, 1316
prepartum
Whole soybean supplementation and cow age class: Effects on intake, digestion, performance, and reproduction of beef cows, 1868
preweaning mortality
Survival analysis of preweaning piglet survival in a dry-cured ham-producing crossbred line, 2486

prion
Copper deficiency in the young bovine results in dramatic decreases in brain copper concentration but does not alter brain prion protein biology, 3069
prion protein gene
Association of the prion protein gene with individual tissue weights in Scottish Blackface sheep, 1737
probiotic
Effects of direct-fed microbial supplementation on digestibility and fermentation end-products in horses fed low- and high-starch concentrates, 2596
Evaluation of alternatives to antibiotics using an *Escherichia coli* K88′ model of piglet diarrhea: Effects on gut microbial ecology, 836
probiotics
Effect of a *Bacillus*-based direct-fed microbial feed supplement on growth performance and pen cleaning characteristics of growing-finishing pigs, 1459
product tracing
Parentage identification using single nucleotide polymorphism genotypes: Application to product tracing, 2508
productivity
Effects of housing finishing pigs in two group sizes and at two floor space allocations on production, health, behavior, and physiological variables, 982
Effects of weaning lambs in two stages or by abrupt separation on their behavior and growth rate, 220
progestagen
Responses to delayed estrus after weaning in sows using oral progestagen treatment, 1996
progesterone
Estrogen and progesterone signaling: Genomic and nongenomic actions in domestic ruminants, 299
progestin
Effect of prebreeding body weight or progestin exposure before breeding on beef heifer performance through the second breeding season, 451
proliferation
Effect of continuous milking and prostaglandin E_2 on milk production and mammary epithelial cell turnover, ultrastructure, and gene expression, 1132
prolificacy
Constitution and evaluation of a long-lived productive rabbit line, 515
Propionibacterium freudenreichii
Effects of increasing dose of live cultures of *Lactobacillus acidophilus* (Strain NP 51) combined with a single dose of *Propionibacterium freudenreichii* (Strain NP 24) on performance and carcass characteristics of finishing beef steers, 756
prostaglandin
Effect of continuous milking and prostaglandin E_2 on milk production and mammary epithelial cell turnover, ultrastructure, and gene expression, 1132
protein
Effect of frequency and amount of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3089
Effect of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3079
Effects of body condition score at parturition and postpartum protein supplementation on estrous behavior and size of the dominant follicle in beef cows, 2549
protein content
Mitochondrial genome polymorphisms associated with longissimus muscle composition in Iberian pigs, 1283
protein degradability
The interaction of harvesting time of day of switchgrass hay and ruminal degradability of supplemental protein offered to beef steers, 159
protein degradation
Evaluation of the fermentation dynamics of soluble crude protein from three protein sources in continuous culture fermenters, 1364
Plasma amino acid profile and expression of the ubiquitin-mediated proteolytic pathway in lambs with induced metabolic acidosis, 2651
protein expression
CENTENNIAL PAPER: Proteomics in animal science, 2430
protein intake
Effects of crude protein intake from grass silage-only diets on the equine colon ecosystem after an abrupt feed change, 3465
protein supplement
Utilization of soybeans or corn milling by-products in beef heifer development diets, 476
protein supplementation
Effects of dietary nonprotein nitrogen on performance, digestibility, ruminal characteristics, and microbial efficiency in crossbred steers, 1173
protein synthesis
Protein elongation rates in tissues of growing and adult sheep, 2288
proteinate
Uptake of zinc from zinc sulfate and zinc proteinate by ovine ruminal and omasal epithelia, 1357
proteolysis
Caspase 3 is not likely involved in the postmortem tenderization of beef muscle, 960
Effect of litter size and birth weight on growth, carcass and pork quality, and their relationship to postmortem proteolysis, 2357
Sarcomere length influences postmortem proteolysis of excised bovine semitendinosus muscle, 1925
proteome
Regional differences in porcine adipocytes isolated from skeletal muscle and adipose tissues as identified by a proteomic approach, 2115
proteomics
CENTENNIAL PAPER: Proteomics in animal science, 2430
PrP gene association
Association of the prion protein gene with individual tissue weights in Scottish Blackface sheep, 1737
puberty
Effect of space allowance during rearing and selection criteria on performance of gilts over three parities in a commercial swine production system, 3181
pulmonary arterial pressure
Inheritance of pulmonary arterial pressure in Angus cattle and its correlation with growth, 815
pyruvate carboxylase
Translational efficiency of bovine pyruvate carboxylase 5′ untranslated region messenger ribonucleic acid variants, 3401

Q

quality
Intramuscular fat content has little influence on the eating quality of fresh pork loin chops, 730
Recovering value from beef carcasses classified as dark cutters by United States Department of Agriculture graders, 1658
quality grade
Predicting beef tenderness using near-infrared spectroscopy, 211
Using the near-infrared system to sort various beef middle and end muscle cuts into tenderness categories, 413
quantitative trait loci
Bovine quantitative trait loci analysis for growth, carcass, and meat quality traits in an F_2 population from a cross between Japanese Black and Limousin, 2821
Quantitative trait loci analysis on *Sus scrofa* chromosome 7 for meat production, meat quality, and carcass traits within a Duroc purebred population, 2833
Quantitative trait locus mapping in an F_2 Duroc × Pietrain resource population: II. Carcass and meat quality traits, 254
quantitative trait loci mapping
Combined detection and introgression of quantitative trait loci underlying desirable traits, 1089
quantitative trait locus
A putative quantitative trait locus on chromosome 20 associated with bovine pathogenic disease incidence, 2455
A quantitative trait locus genome scan for porcine muscle fiber traits reveals overdominance and epistasis, 3290
Quantitative trait loci mapping in an F_2 Duroc × Pietrain resource population: I. Growth traits, 241

R

rabbit
Effect of selection for growth rate on relative growth in rabbits, 3409

rabbit breeding
Constitution and evaluation of a long-lived productive rabbit line, 515
rabbit fertilized embryos
Trichostatin A and nuclear reprogramming of cloned rabbit embryos, 1106
ractopamine
Carcass, meat quality, and sensory characteristics of heavy body weight pigs fed ractopamine hydrochloride (Paylean), 3544
Differential response of cull cow muscles to the hypertrophic actions of ractopamine-hydrogen chloride, 3568
Effects of ractopamine supplementation and postmortem aging on longissimus muscle palatability of beef steers differing in biological type, 205
Interactive effect of ractopamine and dietary fat source on pork quality characteristics of fresh pork chops during simulated retail display, 2711
ractopamine-hydrochloride
Effect of feedlot management system on response to ractopamine-HCl in yearling steers, 2401
The effects of ractopamine-hydrogen chloride (Optaflexx) on performance, carcass characteristics, and meat quality of finishing feedlot heifers, 902
ram
Evaluation of three-ram cohort serving capacity tests as a substitute for individual serving capacity tests, 2024
random regression
Evaluation of methods for computing approximate accuracies of predicted breeding values in maternal random regression models for growth traits in beef cattle, 1057
random regression
Genetic components of heat stress in finishing pigs: Parameter estimation, 2076
Multi-trait and random regression approaches for addressing the wide range of weaning ages in Asturiana de los Valles beef cattle for genetic parameter estimation, 278
Quantitative trait loci mapping in an F_2 Duroc × Pietrain resource population: 1. Growth traits, 241
random regression model
Genetic evaluation of growth in a multibreed beef cattle population using random regression-linear spline models, 267
rangeland
Comparison of low-moisture blocks and salt for manipulating grazing patterns of beef cows, 1271
Milk yield of primiparous beef cows from three calving systems and varied weaning ages, 768
reactivity score
Effect of neck injection and handler visibility on behavioral reactivity of beef steers, 1215
readability
Technical note: Evaluation of the official identification system for pigs for sale in New South Wales, 472
real-time polymerase chain reaction
Relationship between myosin heavy chain isoform expression and muscling in several diverse pig breeds, 795
Technical note: A novel method for routine genotyping of horse coat color gene polymorphisms, 1291
Technical note: Occurrence in fecal microbiota of genes conferring resistance to both macrolide-lincosamide-streptogramin B and tetracyclines concomitant with feeding of beef cattle with tylosin, 2385
receiving
The effects of feeding flaxseed during the receiving period on morbidity, mortality, performance, and carcass characteristics of heifers, 3054
receiving cattle
Source of dietary lipid may modify the immune response in stressed feeder cattle, 1382
recycling
Effect of frequency and amount of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3089
Effect of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3079
regional difference
Regional differences in porcine adipocytes isolated from skeletal muscle and adipose tissues as identified by a proteomic approach, 2115
regression model
Prediction of the energy content of tallgrass prairie hay, 1372
regulated gene expression
Identification and expression pattern of cationic amino acid transporter-1 mRNA in small intestinal epithelia of Angus steers at four production stages, 620
regulation
Meeting environmental requirements for the land application of manure, 3228
relative feed value
Comparing relative feed value with degradation parameters of grass and legume forages, 2344
removal reason
Factors affecting length of productive life in Swedish commercial sows, 432
removal risk
Factors affecting length of productive life in Swedish commercial sows, 432
repeatability
Models for genetic evaluation of Nelore cattle mature body weight, 2840
reproduction
A regional evaluation of the effect of fiber type in gestation diets on sow reproductive performance, 1573
Effect of dried corn distillers grains plus solubles compared with soybean hulls, in late gestation heifer diets, on animal and reproductive performance, 1697
Effects of dietary organic and inorganic trace mineral levels on sow reproductive performances and daily mineral intakes over six parities, 2247
Effects of neonatal iron status, iron injections at birth, and weaning in young pigs from sows fed either organic or inorganic trace minerals, 2261
Effects of supplementation frequency on performance, reproductive, and metabolic responses of Brahman-crossbred females, 2296
reproductive performance
A regional evaluation of injections of high levels of vitamin A on reproductive performance of sows, 333
Sow line differences in heat stress tolerance expressed in reproductive performance traits, 3330
requirement
An estimate of the methionine requirement and its variability in growing pigs using the indicator amino acid oxidation technique, 364
Nitrogen transactions along the gastrointestinal tract of cattle: A meta-analytical approach, 660
research
ASAS CENTENNIAL PAPER: Impacts of animal science research on United States sheep production and predictions for the future, 3252
residual feed intake
Effects of divergent selection for serum insulin-like growth factor-I concentration on performance, feed efficiency, and ultrasound measures of carcass composition traits in Angus bulls and heifers, 2862
Selection response and genetic parameters for residual feed intake in Yorkshire swine, 287
The effect of residual feed intake classification on forage intake by grazing beef cows, 2670
The relationship of feeding behavior to residual feed intake in crossbred Angus steers fed traditional and no-roughage diets, 180
restricted feeding
Effect of intake level and alfalfa substitution for grass hay on ruminal kinetics of fiber digestion and particle passage in beef cattle, 134
restriction
Dietary restriction reduces the rate of estradiol clearance in sheep (*Ovis aries*), 1124
resveratrol
Porcine adipose triglyceride lipase complementary deoxyribonucleic acid clone, expression pattern, and regulation by resveratrol, 1781
retail
National Meat Case Study 2004: Fresh product types and allocation of retail space, 3586
National Meat Case Study 2004: Product labeling information, branding, and packaging trends, 3593
retail display
Effects of dark storage and retail display on beef chuck and round muscles enhanced with ammonium hydroxide, salt, and carbon monoxide, 972
Interactive effect of ractopamine and dietary fat source on pork quality characteristics of fresh pork chops during simulated retail display, 2711

rhythm
Light exposure during night suppresses nocturnal increase in growth hormone secretion in Holstein steers, 1799
ribosome transit time
Protein elongation rates in tissues of growing and adult sheep, 2288
rice
The effects of feeding rice in substitution of corn and the degree of starch gelatinization of rice on the digestibility of dietary components and productive performance of young pigs, 119
rickets
Expression of matrix metalloproteinases during vascularization and ossification of normal and impaired avian growth plate, 1306
roughage
Influence of slice baling on feeding value of alfalfa hay in receiving and finishing diets for feedlot cattle, 2749
roughage level
Effects of calcium magnesium carbonate and roughage level on feedlot performance, ruminal metabolism, and site and extent of digestion in steers fed high-grain diets, 2998
roughage particle size
Influence of slice baling on feeding value of alfalfa hay in receiving and finishing diets for feedlot cattle, 2749
rumen
BOARD-INVITED REVIEW: Recent advances in biohydrogenation of unsaturated fatty acids within the rumen microbial ecosystem, 397
Uptake of zinc from zinc sulfate and zinc proteinate by ovine ruminal and omasal epithelia, 1357
rumen digestion
In vitro gas production profiles to estimate extent and effective first-order rate of neutral detergent fiber digestion in the rumen, 651
Prediction of in vivo neutral detergent fiber digestibility and digestion rate of potentially digestible neutral detergent fiber: Comparison of models, 2657
rumen ecology
Manipulation of rumen ecology by dietary lemongrass (*Cymbopogon citratus* Stapf.) powder supplementation, 3497
rumen fermentation
Effect of rumen-degradable protein balance deficit on voluntary intake, microbial protein synthesis, and nitrogen metabolism in growing double-muscled Belgian Blue bulls fed corn silage-based diet, 680
Effect of the magnitude of the decrease of rumen pH on rumen fermentation in a dual-flow continuous culture system, 378
Manipulation of rumen ecology by dietary lemongrass (*Cymbopogon citratus* Stapf.) powder supplementation, 3497
rumen fluid
Effects of yeast culture and fibrolytic enzyme supplementation on in vitro fermentation characteristics of low-quality cereal straws, 1164
Supplemental algal meal alters the ruminal *trans*-18:1 fatty acid and conjugated linoleic acid composition in cattle, 187
rumen metabolism
Matching plant and animal processes to alter nutrient supply in strip-grazed cattle: Timing of herbage and fasting allocation, 1006
rumen protozoa
Improved in vitro procedure for maintaining stock cultures of three genera of rumen protozoa, 1395
rumen-degradable protein balance
Effect of rumen-degradable protein balance deficit on voluntary intake, microbial protein synthesis, and nitrogen metabolism in growing double-muscled Belgian Blue bulls fed corn silage-based diet, 680
rumenic acid
Cobalt supplied per os reduces the mammary Δ^9-desaturase index of bovine milk, 3062
ruminal acidosis
Performance, behavior, and welfare of Friesian heifers housed in pens with two, four, and eight individuals per concentrate feeding place, 1446
ruminal alkalizer
Effects of calcium magnesium carbonate and roughage level on feedlot performance, ruminal metabolism, and site and extent of digestion in steers fed high-grain diets, 2998
ruminal fermentation
Influence of direct-fed fibrolytic enzymes on diet digestibility and ruminal activity in sheep fed a grass hay-based diet, 1617
ruminally undegradable protein
Evaluation of secondary protein nutrients as a substitute for soybean meal in diets for beef steers and meat goats, 146
ruminant
ASAS Centennial Paper: Contributions in the *Journal of Animal Science* to understanding cattle metabolic and digestive disorders, 1711
ASAS Centennial Paper: Utilization of pasture and forages by ruminants: A historical perspective, 3647
Nitrogen and mineral balance of lambs artificially infected with *Haemonchus contortus* and fed tanniferous sainfoin (*Onobrychis viciifolia*), 1879
Tolerance of ruminant animals to high dose in-feed administration of a selenium-enriched yeast, 197

S

safflower seed
Effects of supplemental safflower and vitamin E during late gestation on lamb growth, serum metabolites, and thermogenesis, 3194
sainfoin
Nitrogen and mineral balance of lambs artificially infected with *Haemonchus contortus* and fed tanniferous sainfoin (*Onobrychis viciifolia*), 1879
salbutamol
The effects of R-salbutamol on behavior and physiology of finishing pigs, 3110
Salmonella
Lairage during transport of eighteen-kilogram pigs has an impact on innate immunity and commensal bacteria diversity in the intestines, 1232
Santa Inês
Milk yield, milk composition, eating behavior, and lamb performance of ewes fed diets containing soybean hulls replacing coastcross (*Cynodon* species) hay, 3511
saponin
Effects of saponins, quercetin, eugenol, and cinnamaldehyde on fatty acid biohydrogenation of forage polyunsaturated fatty acids in dual-flow continuous culture fermenters, 3045
sarcomere length
Sarcomere length influences postmortem proteolysis of excised bovine semitendinosus muscle, 1925
scrapie
Association of the prion protein gene with individual tissue weights in Scottish Blackface sheep, 1737
season
Effects of season and distance moved during loading on transport losses of market-weight pigs in two commercially available types of trailer, 3137
Secale cereale L
Animal performance and economic comparison of novel and toxic endophyte tall fescues to cool-season annuals, 2043
secondary compound
The effect of polyethylene glycol on intake of Mediterranean shrubs by sheep and goats, 3491
secondary protein nutrient
Evaluation of secondary protein nutrients as a substitute for soybean meal in diets for beef steers and meat goats, 146
selected population
Quantitative trait loci analysis on *Sus scrofa* chromosome 7 for meat production, meat quality, and carcass traits within a Duroc purebred population, 2833
selection
Effect of selection for growth rate on relative growth in rabbits, 3409
Evaluation of carcass characteristics of *Bos indicus* and tropically adapted *Bos taurus* breeds selected for postweaning weight, 1770
Experimental selection for calving ease and postnatal growth in seven cattle populations. I. Changes in estimated breeding values, 2093
Selection response and genetic parameters for residual feed intake in Yorkshire swine, 287
selection index
Genetic change results from selection on an economic breeding objective in beef cattle, 3348
selection response
Experimental selection for calving ease and postnatal growth in seven cattle populations. II. Phenotypic differences, 2103

selenium
Effect of dietary supplementation with selenium-enriched yeast or sodium selenite on selenium tissue distribution and meat quality in beef cattle, 3100
Effects of gestational plane of nutrition and selenium supplementation on mammary development and colostrum quality in pregnant ewe lambs, 2415
Effects of selenium on organ mass and cellularity, 890
Effects of selenium supply and dietary restriction on maternal and fetal metabolic hormones in pregnant ewe lambs, 1254
Effects of supplement type and selenium source on measures of growth and selenium status in yearling beef steers, 1472
Tolerance of ruminant animals to high dose in-feed administration of a selenium-enriched yeast, 197
selenocysteine
Effect of dietary supplementation with selenium-enriched yeast or sodium selenite on selenium tissue distribution and meat quality in beef cattle, 3100
selenomethionine
Effect of dietary supplementation with selenium-enriched yeast or sodium selenite on selenium tissue distribution and meat quality in beef cattle, 3100
selenomethionine tolerance
Tolerance of ruminant animals to high dose in-feed administration of a selenium-enriched yeast, 197
sensory
Impact of beef cattle diets containing corn or sorghum distillers grains on beef color, fatty acid profiles, and sensory attributes, 923
Intramuscular fat content has little influence on the eating quality of fresh pork loin chops, 730
sensory attribute
Effects of different packaging atmospheres and injection-enhancement on beef tenderness, sensory attributes, desmin degradation, and display color, 2697
sericea lespedeza
The effects of feeding sericea lespedeza hay on growth rate of goats naturally infected with gastrointestinal nematodes, 2328
serving capacity test
Evaluation of three-ram cohort serving capacity tests as a substitute for individual serving capacity tests, 2024
sesquiterpene
Effects of *cis*-β-ocimene, *cis*-sabinene hydrate, and monoterpene and sesquiterpene mixtures on alfalfa pellet intake by lambs, 1478
sex
Meta-analysis of the effect of animal maturity on muscle characteristics in different muscles, breeds, and sexes of cattle, 2872
The effects of sex and slaughter weight on growth performance and carcass traits of pigs intended for dry-cured ham from Teruel (Spain), 1933
sex difference
Genetic analysis of results of a Swedish behavior test on German Shepherd Dogs and Labrador Retrievers, 2853
sex hormone-binding globulin
Dietary restriction reduces the rate of estradiol clearance in sheep (*Ovis aries*), 1124
sex ratio
Cryptorchidism and sex ratio are associated in dogs and pigs, 2480
sexual behavior
Evaluation of three-ram cohort serving capacity tests as a substitute for individual serving capacity tests, 2024
shear force
Comparison of alternative beef production systems based on forage finishing or grain-forage diets with or without growth promotants: 2. Meat quality, fatty acid composition, and overall palatability, 1678
sheep
AMP-activated protein kinase and adipogenesis in sheep fetal skeletal muscle and 3T3-L1 cells, 1296
Assessing genetic gain, inbreeding, and bias attributable to different flock genetic means in alternative sheep sire referencing schemes, 526
Association of the prion protein gene with individual tissue weights in Scottish Blackface sheep, 1737
B-mode, real-time ultrasound for estimating carcass measures in live sheep: Accuracy of ultrasound measures and their relationships with carcass yield and value, 3203
Central role of the melanocortin-4 receptors in appetite regulation after endotoxin, 2557
Changes in connectedness over time in alternative sheep sire referencing schemes, 536
Changes in food intake and circulating leptin due to gastrointestinal parasitism in lambs of two breeds, 1891
Dietary restriction reduces the rate of estradiol clearance in sheep (*Ovis aries*), 1124
Effects of *cis*-β-ocimene, *cis*-sabinene hydrate, and monoterpene and sesquiterpene mixtures on alfalfa pellet intake by lambs, 1478
Effects of selenium on organ mass and cellularity, 890
Effects of supplemental safflower and vitamin E during late gestation on lamb growth, serum metabolites, and thermogenesis, 3194
Effects of weaning lambs in two stages or by abrupt separation on their behavior and growth rate, 220
Genotype by environment interaction for lamb weaning weight in two Norwegian sheep breeds, 33
In vitro methane emission and acetate:propionate ratio are decreased when artificial stimulation of the rumen wall is combined with increasing grain diets in sheep, 384
Learned appetites for calcium, phosphorus, and sodium in sheep, 738
Milk yield, milk composition, eating behavior, and lamb performance of ewes fed diets containing soybean hulls replacing coastcross (*Cynodon* species) hay, 3511
Nitrogen and mineral balance of lambs artificially infected with *Haemonchus contortus* and fed tanniferous sainfoin (*Onobrychis viciifolia*), 1879
Plasma amino acid profile and expression of the ubiquitin-mediated proteolytic pathway in lambs with induced metabolic acidosis, 2651
Protein elongation rates in tissues of growing and adult sheep, 2288
Technical Note: Comparison of traditional needle vaccination with pneumatic, needle-free vaccination for sheep, 1468
sheep production
ASAS CENTENNIAL PAPER: Impacts of animal science research on United States sheep production and predictions for the future, 3252
shelf life
Effects of dark storage and retail display on beef chuck and round muscles enhanced with ammonium hydroxide, salt, and carbon monoxide, 972
short-chain fatty acid
Comparative in vitro fermentation activity in the canine distal gastrointestinal tract and fermentation kinetics of fiber sources, 2979
shrubland
The effect of polyethylene glycol on intake of Mediterranean shrubs by sheep and goats, 3491
sickness behavior
Behavior of dairy calves after a low dose of bacterial endotoxin, 2920
silage
Effects of crude protein intake from grass silage-only diets on the equine colon ecosystem after an abrupt feed change, 3465
simulation
Assessing genetic gain, inbreeding, and bias attributable to different flock genetic means in alternative sheep sire referencing schemes, 526
Changes in connectedness over time in alternative sheep sire referencing schemes, 536
simulation
Different methods of selecting animals for genotyping to maximize the amount of genetic information known in the population, 2471
single nucleotide polymorphism
Marker-assisted assessment of genotype by environment interaction: A case study of single nucleotide polymorphism-mortality association in broilers in two hygiene environments, 3358
Parentage identification using single nucleotide polymorphism genotypes: Application to product tracing, 2508
Polymorphisms and haplotypes in the bovine neuropeptide Y, growth hormone receptor, ghrelin, insulin-like growth factor 2, and uncoupling proteins 2 and 3 genes and their associations with measures of growth, performance, feed efficiency, and carcass merit in beef cattle, 1
Promoter region of the bovine growth hormone receptor gene: Single nucleotide polymorphism discovery in cattle and association with performance in Brangus bulls, 3315
Single nucleotide polymorphisms in several porcine cathepsin genes are associated with growth, carcass, and production traits in Italian Large White pigs, 3300

site and extent of digestion
Matching plant and animal processes to alter nutrient supply in strip-grazed cattle: Timing of herbage and fasting allocation, 1006
skeletal muscle
AMP-activated protein kinase and adipogenesis in sheep fetal skeletal muscle and 3T3-L1 cells, 1296
skeletal muscle
Differential response of cull cow muscles to the hypertrophic actions of ractopamine-hydrogen chloride, 3568
slaughter weight
Influence of sex and castration of females on growth performance and carcass and meat quality of heavy pigs destined for the dry-cured industry, 1410
The effects of sex and slaughter weight on growth performance and carcass traits of pigs intended for dry-cured ham from Teruel (Spain), 1933
SLC7A1
Identification and expression pattern of cationic amino acid transporter-1 mRNA in small intestinal epithelia of Angus steers at four production stages, 620
small intestine
Identification and expression pattern of cationic amino acid transporter-1 mRNA in small intestinal epithelia of Angus steers at four production stages, 620
sodium
Learned appetites for calcium, phosphorus, and sodium in sheep, 738
sodium-glucose cotransporter-1
Effect of diet containing phytate and phytase on the activity and messenger ribonucleic acid expression of carbohydrase and transporter in chickens, 3432
soluble protein
Evaluation of the fermentation dynamics of soluble crude protein from three protein sources in continuous culture fermenters, 1364
somatic cell nuclear transfer embryos
Trichostatin A and nuclear reprogramming of cloned rabbit embryos, 1106
somatotropin
Endocrine factors and ovarian follicles are influenced by body condition and somatotropin in postpartum beef cows, 1335
sorghum
Influence of dry-rolling and tempering agent addition during the steam-flaking of sorghum grain on its feeding value for feedlot cattle, 916
source-verified
Chemical and sensory properties of beef of known source and finished on wet distillers grains diets containing varying types and levels of roughage, 949
sow
A regional evaluation of injections of high levels of vitamin A on reproductive performance of sows, 333
A regional evaluation of the effect of fiber type in gestation diets on sow reproductive performance, 1573
Digestion of carbohydrates and utilization of energy in sows fed diets with contrasting levels and physicochemical properties of dietary fiber, 2208
Effect of leg conformation on survivability of Duroc, Landrace, and Large White sows, 2392
Effect of soluble and insoluble dietary fiber on embryo survival and sow performance, 2576
Effect of soluble and insoluble fiber on energy digestibility, nitrogen retention, and fiber digestibility of diets fed to gestating sows, 2568
Effects of dietary organic and inorganic trace mineral levels on sow reproductive performances and daily mineral intakes over six parities, 2247
Effects of late introduction of sows to two farrowing environments on the progress of farrowing and maternal behavior, 2730
Effects of shaded versus unshaded wallows on behavior, performance, and physiology of the outdoor lactating sow, 3628
Exercising stall-housed gestating gilts: Effects on lameness, the musculo-skeletal system, production, and behavior, 3166
Factors affecting length of productive life in Swedish commercial sows, 432
Influence of dietary fiber on luminal environment and morphology in the small and large intestine of sows, 2217
Mortality, death interval, survivals, and herd factors for death in gilts and sows in commercial breeding herds, 3159
Responses to delayed estrus after weaning in sows using oral progestagen treatment, 1996
Sow line differences in heat stress tolerance expressed in reproductive performance traits, 3330
Utilization of distillers dried grains with solubles and phytase in sow lactation diets to meet the phosphorus requirement of the sow and reduce fecal phosphorus concentration, 112
sow line
Sow line differences in heat stress tolerance expressed in reproductive performance traits, 3330
soybean hull
Milk yield, milk composition, eating behavior, and lamb performance of ewes fed diets containing soybean hulls replacing coastcross (*Cynodon* species) hay, 3511
soybean meal
Effect of dietary soybean oil and soybean protein concentration on the concentration of digestible amino acids in soybean products fed to growing pigs, 1841
space allocation
National Meat Case Study 2004: Fresh product types and allocation of retail space, 3586
space allowance
Effect of space allowance during rearing and selection criteria on performance of gilts over three parities in a commercial swine production system, 3181
Effects of housing finishing pigs in two group sizes and at two floor space allocations on production, health, behavior, and physiological variables, 982
species
National Meat Case Study 2004: Fresh product types and allocation of retail space, 3586
spline
Genetic evaluation of growth in a multibreed beef cattle population using random regression-linear spline models, 267
starch
Effects of direct-fed microbial supplementation on digestibility and fermentation end-products in horses fed low- and high-starch concentrates, 2596
Effects of six carbohydrate sources on diet digestibility and postprandial glucose and insulin responses in cats, 2237
starch gelatinization
The effects of feeding rice in substitution of corn and the degree of starch gelatinization of rice on the digestibility of dietary components and productive performance of young pigs, 119
steam-flake
Influence of dry-rolling and tempering agent addition during the steam-flaking of sorghum grain on its feeding value for feedlot cattle, 916
steam-flaked corn
Effects of grain processing and dietary lipid source on performance, carcass characteristics, plasma fatty acids, and sensory properties of steaks from finishing cattle, 167
stearoyl-coenzyme A desaturase
Cobalt supplied per os reduces the mammary Δ^9-desaturase index of bovine milk, 3062
steer
Effect of feedlot management system on response to ractopamine-HCl in yearling steers, 2401
Effects of preshipping management on measures of stress and performance of beef steers during feedlot receiving, 2016
Effects of supplement type and selenium source on measures of growth and selenium status in yearling beef steers, 1472
Effects of supplemental fat source on nutrient digestion and ruminal fermentation in steers, 640
Evaluation of secondary protein nutrients as a substitute for soybean meal in diets for beef steers and meat goats, 146
Performance by feedlot steers and heifers: Daily gain, mature body weight, dry matter intake, and dietary energetics, 2680
sterol regulatory element binding transcription factor 1
Sterol regulatory element binding transcription factor 1 expression and genetic polymorphism significantly affect intramuscular fat deposition in the longissimus muscle of Erhualian and Sutai pigs, 57
stillborn piglet
Effects of late introduction of sows to two farrowing environments on the progress of farrowing and maternal behavior, 2730
stocker
Effect of fat supplementation and wheat pasture maturity on forage intake and digestion characteristics of steers grazing wheat pasture, 1263

Intake and digestion of wheat forage by stocker calves and lambs, 2424
stockpiled tall fescue
Allocating forage to fall-calving cow-calf pairs strip-grazing stockpiled tall fescue, 780
Streptococcus bovis
Effects of feeding polyclonal antibody preparations on rumen fermentation patterns, performance, and carcass characteristics of feedlot steers, 3023
streptomycin
Improved in vitro procedure for maintaining stock cultures of three genera of rumen protozoa, 1395
stress
Effects of commingling beef calves from different sources and weaning protocols during a forty-two-day receiving period on performance and bovine respiratory disease, 3146
Effects of preshipping management on measures of stress and performance of beef steers during feedlot receiving, 2016
Physiological and immunological responses to weaning and transport in the young pig: Modulation by administration of porcine somatotropin, 2913
Prenatal stress effects on pig development and response to weaning, 1316
stromal-vascular
Differentiation of bovine intramuscular and subcutaneous stromal-vascular cells exposed to dexamethasone and troglitazone, 2531
subcutaneous
Development and evaluation of empirical equations to interconvert between twelfth-rib fat and kidney, pelvic, and heart fat respective fat weights and to predict initial conditions of fat deposition models for beef cattle, 1984
subcutaneous adipose tissue
Conjugated linoleic acid content in adipose tissue of calves suckling beef cows on pasture and supplemented with raw or extruded soybeans, 1624
suckling calf
Conjugated linoleic acid content in adipose tissue of calves suckling beef cows on pasture and supplemented with raw or extruded soybeans, 1624
suckling kid
Carcass composition and meat quality of equally mature kids and lambs, 1943
suckling lamb
Carcass composition and meat quality of equally mature kids and lambs, 1943
sugar absorption
Citrulline and intestinal fatty acid-binding protein: Longitudinal markers of postweaning small intestinal function in pigs?, 3440
sugar beet pulp
Evaluation of a dynamic in vitro model to simulate the porcine ileal digestion of diets differing in carbohydrate composition, 1156
sunflower seed
Effects of dietary sunflower seeds and tylosin phosphate on production variables, carcass characteristics, fatty acid composition, and liver abscess incidence in crossbred steers, 3125
supplement
Comparison of low-moisture blocks and salt for manipulating grazing patterns of beef cows, 1271
supplementation
Effect of supplemental energy source and frequency on growing calf performance, 3504
Manipulation of rumen ecology by dietary lemongrass (*Cymbopogon citratus* Stapf.) powder supplementation, 3497
supplementation frequency
Effects of supplementation frequency on performance, reproductive, and metabolic responses of Brahman-crossbred females, 2296
suppression subtractive hybridization
Identification of genes downregulated during differentiation of porcine mesenteric adipocytes, 3367
survival
Mortality, death interval, survivals, and herd factors for death in gilts and sows in commercial breeding herds, 3159
survival analysis
Effect of leg conformation on survivability of Duroc, Landrace, and Large White sows, 2392
Factors affecting length of productive life in Swedish commercial sows, 432
Survival analysis of preweaning piglet survival in a dry-cured ham-producing crossbred line, 2486
survival rate
The fibroblast growth factor 2 gene is associated with embryonic mortality in cattle, 2063
sweetener
Effects of sweeteners on individual feed intake characteristics and performance in group-housed weanling pigs, 2990
swine
Determining an optimum lysine:calorie ratio for barrows and gilts in a commercial finishing facility, 2190
Effect of a *Bacillus*-based direct-fed microbial feed supplement on growth performance and pen cleaning characteristics of growing-finishing pigs, 1459
Effects of dried distillers grains with solubles on growing and finishing pig performance in a commercial environment, 1579
Effects of temperature stress on growth performance and bacon quality in grow-finish pigs housed at two densities, 1789
Estimation of genetic parameters for average daily gain using models with competition effects, 2525
Evaluation of NutriDense low-phytate corn and added fat in growing and finishing swine diets, 1556
Lairage during transport of eighteen-kilogram pigs has an impact on innate immunity and commensal bacteria diversity in the intestines, 1232
Prenatal stress effects on pig development and response to weaning, 1316
The correlation of chemical and physical corn kernel traits with growth performance and carcass characteristics in pigs, 592
switchgrass
The interaction of harvesting time of day of switchgrass hay and ruminal degradability of supplemental protein offered to beef steers, 159

T

12S rRNA
Mitochondrial genome polymorphisms associated with longissimus muscle composition in Iberian pigs, 1283
2-hydroxy-4-(methylthio)-butanoic acid
Effects of 2-hydroxy-4-(methylthio)-butanoic acid on performance and carcass characteristics of finishing beef cattle and on fermentation in continuous culture, 1951
25-hydroxyvitamin D_3
Use of 25-hydroxyvitamin D_3 and dietary calcium to improve tenderness of beef from the round of beef cows, 1637
Use of 25-hydroxyvitamin D_3 and vitamin E to improve tenderness of beef from the longissimus dorsi of heifers, 1649
3T3-L1 cells
AMP-activated protein kinase and adipogenesis in sheep fetal skeletal muscle and 3T3-L1 cells, 1296
tall fescue
Forage systems for cow-calf production in the Appalachian region, 2032
tannin
The effect of polyethylene glycol on intake of Mediterranean shrubs by sheep and goats, 3491
target body weight
Effect of prebreeding body weight or progestin exposure before breeding on beef heifer performance through the second breeding season, 451
taste panel
Comparison of alternative beef production systems based on forage finishing or grain-forage diets with or without growth promotants: 2. Meat quality, fatty acid composition, and overall palatability, 1678
tattoo
Technical note: Evaluation of the official identification system for pigs for sale in New South Wales, 472
T-cadherin
Fasting regulates the expression of adiponectin receptors in young growing pigs, 3377
teaching
ASAS Centennial Paper: Animal science teaching: A century of excellence, 3640
temperature stress
Effects of temperature stress on growth performance and bacon quality in grow-finish pigs housed at two densities, 1789

tempering
Influence of dry-rolling and tempering agent addition during the steam-flaking of sorghum grain on its feeding value for feedlot cattle, 916
tenderness
Caspase 3 is not likely involved in the postmortem tenderization of beef muscle, 960
Effect of two dietary concentrate levels on tenderness, calpain and calpastatin activities, and carcass merit in Waguli and Brahman steers, 1426
Effects of aging on beef chuck and loin muscles enhanced with ammonium hydroxide and salt, 1200
Effects of packaging atmospheres on beef instrumental tenderness, fresh color stability, and internal cooked color, 1191
Effects of ractopamine supplementation and postmortem aging on longissimus muscle palatability of beef steers differing in biological type, 205
Enhancement of beef chuck and loin muscles with ammonium hydroxide and salt, 967
Physicochemical properties of meat of Italian Heavy Draft horses slaughtered at the age of eleven months, 1205
Predicting beef tenderness using near-infrared spectroscopy, 211
Sarcomere length influences postmortem proteolysis of excised bovine semitendinosus muscle, 1925
Tenderness, sensory, and color attributes of two muscles from the M. quadriceps femoris when fabricated using a modified hot-boning technique, 2690
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the quality of pork from female pigs, 1402
Use of 25-hydroxyvitamin D_3 and dietary calcium to improve tenderness of beef from the round of beef cows, 1637
Use of 25-hydroxyvitamin D_3 and vitamin E to improve tenderness of beef from the longissimus dorsi of heifers, 1649
Using the near-infrared system to sort various beef middle and end muscle cuts into tenderness categories, 413
terminal restriction fragment length polymorphism
Evaluation of alternatives to antibiotics using an *Escherichia coli* $K88^+$ model of piglet diarrhea: Effects on gut microbial ecology, 836
tet
Technical note: Occurrence in fecal microbiota of genes conferring resistance to both macrolide-lincosamide-streptogramin B and tetracyclines concomitant with feeding of beef cattle with tylosin, 2385
tethering
Technical Note: Effects of tethering on herbage selection, intake and digestibility, grazing behavior, and energy expenditure by Boer × Spanish goats grazing high-quality herbage, 1245
thermal combustion
Comparative sulfur analysis using thermal combustion or inductively coupled plasma methodology and mineral composition of common livestock feedstuffs, 2377
thermogenesis
Effects of supplemental safflower and vitamin E during late gestation on lamb growth, serum metabolites, and thermogenesis, 3194
thiazolidinedione
Optimization of in vitro conditions for bovine subcutaneous and intramuscular preadipocyte differentiation, 73
thiobarbituric acid reactive substance
Effect of dietary supplementation with selenium-enriched yeast or sodium selenite on selenium tissue distribution and meat quality in beef cattle, 3100
threonine
Effect of common antinutritive factors and fibrous feedstuffs in pig diets on amino acid digestibilities with special emphasis on threonine, 609
thyroid hormone
Endocrine factors and ovarian follicles are influenced by body condition and somatotropin in postpartum beef cows, 1335
tibial dyschondroplasia
Expression of matrix metalloproteinases during vascularization and ossification of normal and impaired avian growth plate, 1306
tilmicosin phosphate
Effects of dietary energy source and level and injection of tilmicosin phosphate on immune function in lipopolysaccharide-challenged beef steers, 1963
timed artificial insemination
Evaluation of human chorionic gonadotropin as a replacement for gonadotropin-releasing hormone in ovulation-synchronization protocols before fixed timed artificial insemination in beef cattle, 2539
tissue
Effect of chromium source on tissue concentration of chromium in pigs, 2971
tocopherol
An evaluation of natural (*RRR*-α-tocopheryl acetate) and synthetic (all-*rac*-α-tocopheryl acetate) vitamin E fortification in the diet or drinking water of weanling pigs, 584
toxic plant
Effect of body condition on consumption of pine needles (*Pinus ponderosa*) by beef cows, 3608
trace mineral
Effects of neonatal iron status, iron injections at birth, and weaning in young pigs from sows fed either organic or inorganic trace minerals, 2261
trailer design
Effects of season and distance moved during loading on transport losses of market-weight pigs in two commercially available types of trailer, 3137
trait
Animal trait ontology: The importance and usefulness of a unified trait vocabulary for animal species, 1485
trans fatty acid
Effects of dietary sunflower seeds and tylosin phosphate on production variables, carcass characteristics, fatty acid composition, and liver abscess incidence in crossbred steers, 3125
trans-11 C18:1
Effect of feeding high-temperature, microtime-treated diets with different lipid sources on conjugated linoleic acid formation in finishing Hanwoo steers, 3033
trans-18:1
Nonionophore antibiotics do not affect the *trans*-18:1 and conjugated linoleic acid composition in beef adipose tissue, 3522
transit time
Effect of live yeast culture supplementation on apparent digestibility and rate of passage in horses fed a high-fiber or high-starch diet, 339
translational efficiency
Translational efficiency of bovine pyruvate carboxylase 5′ untranslated region messenger ribonucleic acid variants, 3401
transport
Lairage during transport of eighteen-kilogram pigs has an impact on innate immunity and commensal bacteria diversity in the intestines, 1232
transport loss
Effects of season and distance moved during loading on transport losses of market-weight pigs in two commercially available types of trailer, 3137
Frequency of the HAL-1843 mutation of the ryanodine receptor gene in dead and nonambulatory-noninjured pigs on arrival at the packing plant, 511
transportation
Effects of preshipping management on measures of stress and performance of beef steers during feedlot receiving, 2016
transportation stress
Transportation of young beef bulls alters circulating physiological parameters that may be effective biomarkers of stress, 1325
transporter
BOARD-INVITED REVIEW: Peptide absorption and utilization: Implications for animal nutrition and health, 2135
transvaccenic acid
Effects of supplemental fat on growth performance and quality of beef from steers fed corn finishing diets, 936
treatment
Effects of dry cow treatment of beef cows on pathogenic organisms, milk somatic cell counts, and calf growth during the subsequent lactation, 748
trenbolone acetate
Effects of implants of trenbolone acetate, estradiol, or both, on muscle insulin-like growth factor-I, insulin-like growth factor-I receptor, estrogen receptor-α, and androgen receptor messenger ribonucleic acid levels in feedlot steers, 3418

tributyrin
Intestinal metabolism of weaned piglets fed a typical United States or European diet with or without supplementation of tributyrin and lactitol, 2952
Trichostatin A
Trichostatin A and nuclear reprogramming of cloned rabbit embryos, 1106
troponin-T
Sarcomere length influences postmortem proteolysis of excised bovine semitendinosus muscle, 1925
true ileal digestibility
The effect of microbial phytase on true and apparent ileal amino acid digestibilities in growing-finishing pigs, 1598
trypsin
Pancreatic mass, cellularity, and α-amylase and trypsin activity in feedlot steers fed diets differing in crude protein concentration, 909
tryptophan
Dietary tryptophan helps to preserve tryptophan homeostasis in pigs suffering from lung inflammation, 3473
twenty-first century
ASAS Centennial Paper: Development of a corn-based beef industry, 3635
tylosin
Efficacy of monensin and tylosin in finishing diets based on steam-flaked corn with and without corn wet distillers grains with solubles, 2270
Technical note: Occurrence in fecal microbiota of genes conferring resistance to both macrolide-lincosamide-streptogramin B and tetracyclines concomitant with feeding of beef cattle with tylosin, 2385
type I fiber
Differential response of cull cow muscles to the hypertrophic actions of ractopamine-hydrogen chloride, 3568

U

ubiquitin-mediated proteolytic pathway
Plasma amino acid profile and expression of the ubiquitin-mediated proteolytic pathway in lambs with induced metabolic acidosis, 2651
ultrasound
B-mode, real-time ultrasound for estimating carcass measures in live sheep: Accuracy of ultrasound measures and their relationships with carcass yield and value, 3203
In vivo estimation of goat carcass composition and body fat partition by real-time ultrasonography, 2369
National cattle evaluation system for combined analysis of carcass characteristics and indicator traits recorded by using ultrasound in Angus cattle, 2518
Technical note: A novel technique to assess internal body fat of cattle by using real-time ultrasound, 763
undegradable intake protein
Effect of dried corn distillers grains plus solubles compared with soybean hulls, in late gestation heifer diets, on animal and reproductive performance, 1697
university
INVITED REVIEW: Animal science departments of the future, 3235
untranslated region
Translational efficiency of bovine pyruvate carboxylase 5′ untranslated region messenger ribonucleic acid variants, 3401
upper critical temperature
Sow line differences in heat stress tolerance expressed in reproductive performance traits, 3330
urea
Effect of frequency and amount of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3089
Effect of rumen-degradable intake protein supplementation on urea kinetics and microbial use of recycled urea in steers consuming low-quality forage, 3079
urea cycle enzyme
Changes of activity and mRNA expression of urea cycle enzymes in the liver of developing Holstein calves, 1526
uterine capacity
Conceptus development during blastocyst elongation in lines of pigs selected for increased uterine capacity or ovulation rate, 2126
uterine pH
Effects of standing estrus and supplemental estradiol on changes in uterine pH during a fixed-time artificial insemination protocol, 2928
uterus
Estrogen and progesterone signaling: Genomic and nongenomic actions in domestic ruminants, 299

V

vaccenic acid
Supplemental algal meal alters the ruminal *trans*-18:1 fatty acid and conjugated linoleic acid composition in cattle, 187
vaccination
Technical Note: Comparison of traditional needle vaccination with pneumatic, needle-free vaccination for sheep, 1468
valine
Isoleucine and valine supplementation of a low-protein corn-wheat-soybean meal-based diet for piglets: Growth performance and nitrogen balance, 2936
value
Recovering value from beef carcasses classified as dark cutters by United States Department of Agriculture graders, 1658
value cut
Tenderness, sensory, and color attributes of two muscles from the M. quadriceps femoris when fabricated using a modified hot-boning technique, 2690
variability
An estimate of the methionine requirement and its variability in growing pigs using the indicator amino acid oxidation technique, 364
variance component
Estimation of maternal variance components considering cow-calf contacts under extensive pastoral systems, 1081
vasoconstriction
Effects of selected combinations of tall fescue alkaloids on the vasoconstrictive capacity of fescue-naïve bovine lateral saphenous veins, 1021
visceral
Development and evaluation of empirical equations to interconvert between twelfth-rib fat and kidney, pelvic, and heart fat respective fat weights and to predict initial conditions of fat deposition models for beef cattle, 1984
vitamin A
A regional evaluation of injections of high levels of vitamin A on reproductive performance of sows, 333
Effect of vitamin A restriction on carcass characteristics and immune status of beef steers, 1609
The effect of vitamin A supplementation on postnatal adipose tissue development of lambs, 3393
vitamin E
An evaluation of natural (*RRR*-α-tocopheryl acetate) and synthetic (all-*rac*-α-tocopheryl acetate) vitamin E fortification in the diet or drinking water of weanling pigs, 584
Effects of supplemental safflower and vitamin E during late gestation on lamb growth, serum metabolites, and thermogenesis, 3194
Use of 25-hydroxyvitamin D_3 and vitamin E to improve tenderness of beef from the longissimus dorsi of heifers, 1649
volatile fatty acid
In vitro methane emission and acetate:propionate ratio are decreased when artificial stimulation of the rumen wall is combined with increasing grain diets in sheep, 384
voluntary intake
Effect of rumen-degradable protein balance deficit on voluntary intake, microbial protein synthesis, and nitrogen metabolism in growing double-muscled Belgian Blue bulls fed corn silage-based diet, 680

W

Waguli
Effect of two dietary concentrate levels on tenderness, calpain and calpastatin activities, and carcass merit in Waguli and Brahman steers, 1426
water quality
Meeting environmental requirements for the land application of manure, 3228

water-holding capacity
Physicochemical properties of meat of Italian Heavy Draft horses slaughtered at the age of eleven months, 1205
The influence of diets supplemented with conjugated linoleic acid, selenium, and vitamin E, with or without animal protein, on the quality of pork from female pigs, 1402
weaned pig
Investigations of energy metabolism in weanling barrows: The interaction of dietary energy concentration and daily feed (energy) intake, 348
weaning
An evaluation of natural (*RRR*-α-tocopheryl acetate) and synthetic (all-*rac*-α-tocopheryl acetate) vitamin E fortification in the diet or drinking water of weanling pigs, 584
Assessment of lactose level in the mid- to late-nursery phase on performance of weanling pigs, 127
Changes of activity and mRNA expression of urea cycle enzymes in the liver of developing Holstein calves, 1526
Citrulline and intestinal fatty acid-binding protein: Longitudinal markers of postweaning small intestinal function in pigs?, 3440
Effects of preshipping management on measures of stress and performance of beef steers during feedlot receiving, 2016
Effects of sweeteners on individual feed intake characteristics and performance in group-housed weanling pigs, 2990
Effects of weaning lambs in two stages or by abrupt separation on their behavior and growth rate, 220
Intestinal metabolism of weaned piglets fed a typical United States or European diet with or without supplementation of tributyrin and lactitol, 2952
Physiological and immunological responses to weaning and transport in the young pig: Modulation by administration of porcine somatotropin, 2913
The effect of heated mash on performance and feeding behavior of newly weaned piglets, 3600
weaning weight
Estimation of maternal variance components considering cow-calf contacts under extensive pastoral systems, 1081
Genotype by environment interaction for lamb weaning weight in two Norwegian sheep breeds, 33
Multi-trait and random regression approaches for addressing the wide range of weaning ages in Asturiana de los Valles beef cattle for genetic parameter estimation, 278
weanling pig
Effect of sodium butyrate on growth performance and response to lipopolysaccharide in weanling pigs, 442
Potato (*Solanum tuberosum* L. cv. Gogu valley) protein as a novel antimicrobial agent in weanling pigs, 1562
welfare
Behavior of dairy calves after a low dose of bacterial endotoxin, 2920
Effect of the number of concentrate feeding places per pen on performance, behavior, and welfare indicators of Friesian calves during the first month after arrival at the feedlot, 419
Performance, behavior, and welfare of Friesian heifers housed in pens with two, four, and eight individuals per concentrate feeding place, 1446
The motivation of cows to walk as thwarted by tethering, 2723
well-being
Mortality, death interval, survivals, and herd factors for death in gilts and sows in commercial breeding herds, 3159
wether
Feeding distillers grains supplements to improve amino acid nutriture of lambs consuming moderate-quality forages, 691
wheat
Effects of xylanase supplementation on the apparent digestibility and digestible content of energy, amino acids, phosphorus, and calcium in wheat and wheat by-products from dry milling fed to grower pigs, 3450
Nutrient digestibility and performance responses of growing pigs fed phytase- and xylanase-supplemented wheat-based diets, 848
wheat bran
Evaluation of a dynamic in vitro model to simulate the porcine ileal digestion of diets differing in carbohydrate composition, 1156
wheat pasture
Effect of fat supplementation and wheat pasture maturity on forage intake and digestion characteristics of steers grazing wheat pasture, 1263
Intake and digestion of wheat forage by stocker calves and lambs, 2424
whole soybean
Whole soybean supplementation and cow age class: Effects on intake, digestion, performance, and reproduction of beef cows, 1868
wolf
ASAS CENTENNIAL PAPER: Perspectives on domestication: The history of our relationship with man's best friend, 3245

X

xylanase
Effects of xylanase supplementation on the apparent digestibility and digestible content of energy, amino acids, phosphorus, and calcium in wheat and wheat by-products from dry milling fed to grower pigs, 3450
Nutrient digestibility and performance responses of growing pigs fed phytase- and xylanase-supplemented wheat-based diets, 848

Y

yellow dent corn
Evaluation of NutriDense low-phytate corn and added fat in growing and finishing swine diets, 1556
yellow grease
Effects of supplemental fat on growth performance and quality of beef from steers fed corn finishing diets, 936
yield grade
Technical Note: The USDA beef yield grade equation requires modification to reflect the current longissimus muscle area to hot carcass weight relationship, 1434

Z

zilpaterol
Effects of duration of zilpaterol hydrochloride feeding and days on the finishing diet on feedlot cattle performance and carcass traits, 2005
zinc
Uptake of zinc from zinc sulfate and zinc proteinate by ovine ruminal and omasal epithelia, 1357

Author index for Volume 86, E-Supplement
2007 Meeting Symposia
(online only, accessible via http://jas.fass.org/content/vol86/14_suppl/)

A

Anderson, R. C., 163
Applegate, T. J., 1, 138
Azain, M. J., 236

B

Bandyk, C. A., 285
Bergen, W. G., 3
Branine, M. E., 285
Byrd, J. A., 163

C

Callaway, T. R., 163
Cannon, M., 51
Caperna, T. J., 105
Carroll, J. A., 126
Cervantes, M., 1
Chester-Jones, H., 205
Chung, K. Y., 226

D

Davis, T. A., 13
Day, K., 207
Dayton, W. R., 217
De Alvaro, C., 94
de Lange, C. F. M., 36
Dodds, K. G., 259
Dwyer, C. M., 246

E

Edrington, T. S., 163
Elsasser, T. H., 105
Everett-Hincks, J. M., 259

F

Fan, M. Z., 1, 36, 138
Farberman, A., 36
Fernández-Veledo, S., 94
Fiorotto, M. L., 13
Foley, S. L., 149, 173
Forsberg, N. E., 51
Frost, R. A., 84

G

Gabler, N. K., 64
Garcia-Guerra, L., 94
Goll, D. E., 19

H

Hall, M. B., 287
Hausman, G. J., 236
Hersom, M. J., 285
Hess, B. W., 188
Huntington, G. B., 287

J

Johnson, B. J., 226

K

Kahl, S., 105
Kim, S. W., 1, 138
Krehbiel, C. R., 285
Kroismayr, A., 140

L

Lang, C. H., 84
Li, C-J., 105
Lippolis, J. D., 53
Lorenzo, M., 94
Lynne, A. M., 149, 173

M

Mares, S. W., 19
Martinez-Hernandez, P. A., 244
Moss, G. E., 188

N

Nayak, R., 149
Neti, G., 19
Nguyen, H. V., 13
Nieto-Vazquez, I., 94
Nisbet, D. J., 163

O

Orellana, R. A., 13

P

Plitzner, C., 140
Poulos, S. P., 236
Pringle, T. D., 236
Provenza, F. D., 271

Q

Quinn, L. S., 75

R

Rideout, T. C., 36
Rule, D. C., 188

S

Sartin, J. L., 105
Schedle, K., 140
Shefer, G., 207
Spurlock, M. E., 64
Suryawan, A., 13

T

Taylor, J. B., 244
Thomas, D. L., 244
Thompson, V. F., 19
Thonney, M. L., 244

V

Velleman, S. G., 205
Vila-Bedmar, R., 94
Vine, A., 207

W

White, M. E., 217
Windisch, W., 140

Y

Yablonka-Reuveni, Z., 207
Yang, C., 36
Yang, X., 36

Subject index for Volume 86, E-Supplement
2007 Meeting Symposia
(online only, accessible via http://jas.fass.org/content/vol86/14_suppl/)

A

adaptation
What does it mean to be locally adapted and who cares anyway?, 271
adaptive
Immunological signaling networks: Integrating the body's immune response, 53
adipogenesis
The influence of thiazolidinediones on adipogenesis in vitro and in vivo: Potential modifiers of intramuscular adipose tissue deposition in meat animals, 236
adipose
The influence of thiazolidinediones on adipogenesis in vitro and in vivo: Potential modifiers of intramuscular adipose tissue deposition in meat animals, 236
adipose tissue
Application of cellular mechanisms to growth and development of food producing animals, 226
Interleukin-15: A muscle-derived cytokine regulating fat-to-lean body composition, 75
amino acid
Postnatal ontogeny of skeletal muscle protein synthesis in pigs, 13
ammonia
Nitrogen recycling through the gut and the nitrogen economy of ruminants: An asynchronous symbiosis, 293
anabolic steroid
Application of cellular mechanisms to growth and development of food producing animals, 226
Cellular and molecular regulation of muscle growth and development in meat animals, 217
antimicrobial resistance
Food animal-associated *salmonella* challenges: Pathogenicity and antimicrobial resistance, 173

B

β-adrenergic agonist
Application of cellular mechanisms to growth and development of food producing animals, 226
beef cattle
A decade of developments in the area of fat supplementation research with beef cattle and sheep, 188
birth weight
Management of maternal-offspring behavior to improve lamb survival in easy care sheep systems, 259
body composition
Interleukin-15: A muscle-derived cytokine regulating fat-to-lean body composition, 75
body condition score
Management of maternal-offspring behavior to improve lamb survival in easy care sheep systems, 259

C

calpain
Myofibrillar protein turnover: The proteasome and the calpains, 19
carbohydrate
Nutrient synchrony: Sound in theory, elusive in practice, 287
cattle
Bi-directional communication: Growth and immunity in domestic livestock, 126
CCAAT/enhancer binding protein alpha
The influence of thiazolidinediones on adipogenesis in vitro and in vivo: Potential modifiers of intramuscular adipose tissue deposition in meat animals, 236
Salmonella
Food animal-associated *Salmonella* challenges: Pathogenicity and antimicrobial resistance, 173
Gastrointestinal microbial ecology and the safety of our food supply as related to *Salmonella*, 163
Salmonella challenges: Prevalence in swine and poultry and potential pathogenicity of such isolates, 149
change
What does it mean to be locally adapted and who cares anyway?, 271
chicken
Salmonella challenges: Prevalence in swine and poultry and potential pathogenicity of such isolates, 149
cytokine
Bi-directional communication: Growth and immunity in domestic livestock, 126
Critical control points in the impact of the proinflammatory immune response on growth and metabolism, 105
Immunological signaling networks: Integrating the body's immune response, 53
Interleukin-15: A muscle-derived cytokine regulating fat-to-lean body composition, 75
Regulation of muscle growth by pathogen-associated molecules, 84

D

digestion
A decade of developments in the area of fat supplementation research with beef cattle and sheep, 188
dystocia
Management of maternal-offspring behavior to improve lamb survival in easy care sheep systems, 259

E

easily releasable myofilament
Myofibrillar protein turnover: The proteasome and the calpains, 19
ecology
Gastrointestinal microbial ecology and the safety of our food supply as related to *Salmonella*, 163
endotoxin
Regulation of muscle growth by pathogen-associated molecules, 84
estradiol
Symposium: Genetic and physiological determinants of maternal behavior and lamb survival: Implications for low-input sheep management, 246

F

fat supplementation
A decade of developments in the area of fat supplementation research with beef cattle and sheep, 188
fermentation
Nutrient synchrony: Sound in theory, elusive in practice, 287
food animal
Food animal-associated *Salmonella* challenges: Pathogenicity and antimicrobial resistance, 173
forage
What does it mean to be locally adapted and who cares anyway?, 271
fossil fuel
What does it mean to be locally adapted and who cares anyway?, 271

G

genetics
Symposium: Genetic and physiological determinants of maternal behavior and lamb survival: Implications for low-input sheep management, 246
glucose uptake
Insulin resistance induced by tumor necrosis factor-α in myocytes and brown adipocytes, 94
growth
Bi-directional communication: Growth and immunity in domestic livestock, 126
Regulation of muscle growth by pathogen-associated molecules, 84
The mammalian target of rapamycin-signaling pathway in regulating metabolism and growth, 36

H

heat loss
Management of maternal-offspring behavior to improve lamb survival in easy care sheep systems, 259

I

immune function
Bi-directional communication: Growth and immunity in domestic livestock, 126
immunology
Immunological signaling networks: Integrating the body's immune response, 53
innate
Immunological signaling networks: Integrating the body's immune response, 53
insulin
Postnatal ontogeny of skeletal muscle protein synthesis in pigs, 13
insulin-like growth factor binding protein
Cellular and molecular regulation of muscle growth and development in meat animals, 217
insulin-like growth factor-I
Cellular and molecular regulation of muscle growth and development in meat animals, 217
interleukin-15
Interleukin-15: A muscle-derived cytokine regulating fat-to-lean body composition, 75
intestinal
Gastrointestinal microbial ecology and the safety of our food supply as related to *Salmonella*, 163

L

lamb survival
Management of maternal-offspring behavior to improve lamb survival in easy care sheep systems, 259
Symposium: Genetic and physiological determinants of maternal behavior and lamb survival: Implications for low-input sheep management, 246
learning
What does it mean to be locally adapted and who cares anyway?, 271
liver
Nitrogen recycling through the gut and the nitrogen economy of ruminants: An asynchronous symbiosis, 293
liver X receptor
Insulin resistance induced by tumor necrosis factor-α in myocytes and brown adipocytes, 94
livestock
What does it mean to be locally adapted and who cares anyway?, 271

M

mammalian target of rapamycin
Regulation of muscle growth by pathogen-associated molecules, 84
The mammalian target of rapamycin-signaling pathway in regulating metabolism and growth, 36
management
Symposium: Genetic and physiological determinants of maternal behavior and lamb survival: Implications for low-input sheep management, 246
marbling
The influence of thiazolidinediones on adipogenesis in vitro and in vivo: Potential modifiers of intramuscular adipose tissue deposition in meat animals, 236
marker amino acid
Measuring in vivo intracellular protein degradation rates in animal systems, 3
maternal behavior
Symposium: Genetic and physiological determinants of maternal behavior and lamb survival: Implications for low-input sheep management, 246
metabolism
A decade of developments in the area of fat supplementation research with beef cattle and sheep, 188
Critical control points in the impact of the proinflammatory immune response on growth and metabolism, 105
Nutrient synchrony: Sound in theory, elusive in practice, 287
The mammalian target of rapamycin-signaling pathway in regulating metabolism and growth, 36
muscle
Cellular and molecular regulation of muscle growth and development in meat animals, 217
Postnatal ontogeny of skeletal muscle protein synthesis in pigs, 13
Regulation of muscle growth by pathogen-associated molecules, 84
Myf5
Defining the transcriptional signature of skeletal muscle stem cells, 207
MyoD
Defining the transcriptional signature of skeletal muscle stem cells, 207
myofibrillar protein turnover
Myofibrillar protein turnover: The proteasome and the calpains, 19
myostatin
Cellular and molecular regulation of muscle growth and development in meat animals, 217

N

neonate
Postnatal ontogeny of skeletal muscle protein synthesis in pigs, 13
nitric oxide
Critical control points in the impact of the proinflammatory immune response on growth and metabolism, 105
nitrogen
Nitrogen recycling through the gut and the nitrogen economy of ruminants: An asynchronous symbiosis, 293
nutrition
Immunological signaling networks: Integrating the body's immune response, 53

O

obesity
Insulin resistance induced by tumor necrosis factor-α in myocytes and brown adipocytes, 94

P

p38 mitogen-activated protein kinase
Insulin resistance induced by tumor necrosis factor-α in myocytes and brown adipocytes, 94
pathogen
Regulation of muscle growth by pathogen-associated molecules, 84
pathogenicity
Salmonella challenges: Prevalence in swine and poultry and potential pathogenicity of such isolates, 149
Food animal-associated *Salmonella* challenges: Pathogenicity and antimicrobial resistance, 173
Pax7
Defining the transcriptional signature of skeletal muscle stem cells, 207
peroxynitrite
Critical control points in the impact of the proinflammatory immune response on growth and metabolism, 105
pig
Bi-directional communication: Growth and immunity in domestic livestock, 126
Postnatal ontogeny of skeletal muscle protein synthesis in pigs, 13

porcine
The influence of thiazolidinediones on adipogenesis in vitro and in vivo: Potential modifiers of intramuscular adipose tissue deposition in meat animals, 236
proinflammatory response
Critical control points in the impact of the proinflammatory immune response on growth and metabolism, 105
proteasome
Myofibrillar protein turnover: The proteasome and the calpains, 19
protein
Nutrient synchrony: Sound in theory, elusive in practice, 287
protein degradation
Interleukin-15: A muscle-derived cytokine regulating fat-to-lean body composition, 75
protein synthesis
Measuring in vivo intracellular protein degradation rates in animal systems, 3
protein-tyr phosphatase 1B
Insulin resistance induced by tumor necrosis factor-α in myocytes and brown adipocytes, 94
proteolysis
Measuring in vivo intracellular protein degradation rates in animal systems, 3
reduction
Gastrointestinal microbial ecology and the safety of our food supply as related to *Salmonella*, 163
reproduction
A decade of developments in the area of fat supplementation research with beef cattle and sheep, 188
rosiglitazone
Insulin resistance induced by tumor necrosis factor-α in myocytes and brown adipocytes, 94
rumen
Nitrogen recycling through the gut and the nitrogen economy of ruminants: An asynchronous symbiosis, 293
Nutrient synchrony: Sound in theory, elusive in practice, 287

S

satellite cell
Defining the transcriptional signature of skeletal muscle stem cells, 207
serotype
Food animal-associated *Salmonella* challenges: Pathogenicity and antimicrobial resistance, 173
sheep
A decade of developments in the area of fat supplementation research with beef cattle and sheep, 188
Bi-directional communication: Growth and immunity in domestic livestock, 126
Symposium: Genetic and physiological determinants of maternal behavior and lamb survival: Implications for low-input sheep management, 246
skeletal muscle
Application of cellular mechanisms to growth and development of food producing animals, 226
Interleukin-15: A muscle-derived cytokine regulating fat-to-lean body composition, 75
The influence of thiazolidinediones on adipogenesis in vitro and in vivo: Potential modifiers of intramuscular adipose tissue deposition in meat animals, 236
Sox
Defining the transcriptional signature of skeletal muscle stem cells, 207
SRF
Defining the transcriptional signature of skeletal muscle stem cells, 207
starvation exposure
Management of maternal-offspring behavior to improve lamb survival in easy care sheep systems, 259
swine
Salmonella challenges: Prevalence in swine and poultry and potential pathogenicity of such isolates, 149
synchrony
Nitrogen recycling through the gut and the nitrogen economy of ruminants: An asynchronous symbiosis, 293
Nutrient synchrony: Sound in theory, elusive in practice, 287

T

thiazolidinedione
The influence of thiazolidinediones on adipogenesis in vitro and in vivo: Potential modifiers of intramuscular adipose tissue deposition in meat animals, 236
Toll-like receptor
Immunological signaling networks: Integrating the body's immune response, 53
tracer methodology
Measuring in vivo intracellular protein degradation rates in animal systems, 3
transcriptional and translational control
Measuring in vivo intracellular protein degradation rates in animal systems, 3
transdifferentiation
Application of cellular mechanisms to growth and development of food producing animals, 226
transforming growth factor-β
Cellular and molecular regulation of muscle growth and development in meat animals, 217
translation initiation
Postnatal ontogeny of skeletal muscle protein synthesis in pigs, 13
turkey
Salmonella challenges: Prevalence in swine and poultry and potential pathogenicity of such isolates, 149
tyrosine nitration
Critical control points in the impact of the proinflammatory immune response on growth and metabolism, 105

U

ubiquitin-proteasome
Measuring in vivo intracellular protein degradation rates in animal systems, 3
urea
Nitrogen recycling through the gut and the nitrogen economy of ruminants: An asynchronous symbiosis, 293